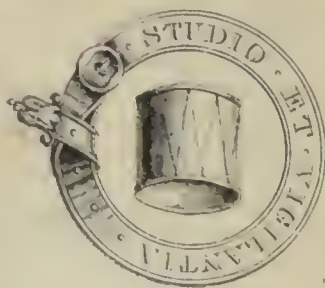


BZP (Palissy)

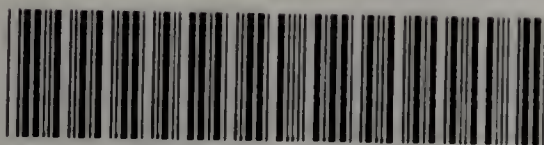


George Burns.




CAR. I. TABORIS.

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PALISSY THE POTTER.

B. PALISSY.



BERNARD PALISSY.

(From a Painting of the Time in the Hôtel de Cluny.)

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BERNARD PALISSY

OF LORRAINE

HENRY GODLEY

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PALISSY THE POTTER.

THE LIFE

OF

BERNARD PALISSY,

OF SAINTES.

BY

HENRY MORLEY,

PROFESSOR OF ENGLISH LITERATURE IN UNIVERSITY COLLEGE, LONDON

"Je n'ai point eu d'autre liure que le ciel et la terre, lequel est conneu de tous, et est donné a tous de connoistre et lire ce beau liure."—PALISSY.

NEW EDITION.

CASSELL PETER & GALPIN:

LONDON, PARIS & NEW YORK.

B2P (Tatissy)



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P R E F A C E.

THE former editions of this book included within the biography a sketch of all that Palissy had written. They gave also, as Appendix, many pages of translation from his works. In 1852, when the book first appeared, little was thought of Bernard Palissy in England, except by a few students of art, who knew him as a Potter, but had scarcely heard of him as a Reformer or Philosopher. Even in France, one who then knew his whole worth remarked, "How completely Palissy has remained unknown, to the peasants whose tongue he employed so well—to the wise men whose science he should have reformed." Those who, before the publication of this book, heard whose life I was writing, usually looked puzzled, and said, "Palissy? Who is he?" But his story once known soon won him due honour; and no less than three of his new admirers in this country benefited themselves and the public by founding upon my narrative cheap volumes for the diffusion of the facts it told. Thus what had to be proved in 1852 has grown into common knowledge; and I have not now to secure faith in the genius of an obscure man by complete digests and multiplied translations from his works. In the present edition, therefore, while the story of Palissy's life as at first told remains untouched, the Appendix of

illustrative translations is omitted, and the descriptions of his books have been greatly but carefully abridged, without omitting record of the leading features of his teaching.

The illustration facing page 241 represents a piece of the mind of Palissy inscribed upon his ware. It is from a photograph kindly sent to me by the late Dr. Herpin, of Geneva, representing a small plate in his collection, which we may take, if we like, for one of the spoilt trial-pieces broken by Palissy himself, in some such manner as is described on page 135 of this narrative. The plate is rather less than five inches across, and roughly made—the under part not being enamelled, and showing traces of the workman's thumb. The enamel—green, blue, yellow, and brown—is brilliant, and in all respects highly characteristic of the work of Palissy. The edges of this little plate have slightly sunk in the furnace, and the piece has been broken into five fragments, which were at a remote date rudely riveted together through holes piercing the inscription. The inscription is in letters, of which some are behind the fashion of the first half of the sixteenth century, although they were all then still in use. The old-fashioned letters trace, in old spelling, a cry of poverty—*l'aute d'ergent, c'est douleur nō paraile* ("For want of money, the grief has no match")—about a gaunt head, which may represent Christ in the form of a French Piers Plowman; or may we fancy it a rude suggestion of Palissy himself?

H. M.

UNIVERSITY COLLEGE, LONDON.

Book the First.

THE FIELD OF LABOUR.

1509—1537

PALISSY THE POTTER.



CHAPTER I.

THE BIRTH OF A WORKMAN.

FOR the birth of Bernard Palissy I can assign no more precise date than the year 1509, with a concession that this may be wrong within a limit of four years on either side. The date chosen by M. Cap, his latest editor, is 1510.

Of the birthplace of Bernard Palissy we only know that it was somewhere in the diocese of Agen. M. Cap, who is followed by succeeding writers, does, indeed, undertake to be particular. He tells us that Palissy was born at Chapelle Biron, a poor hamlet near the small town of Biron, in Perigord.

The town of Biron lies so near the southern boundary of Perigord, upon the little river Lade, that to descend the Lade only so far as to Chapelle Biron is to cross from Perigord into the Agenois. Chapelle Biron is placed about three quarters of a mile over the border; but although politically situated in the diocese of Agen, it belongs, by virtue of its scenery, to Perigord.

Perigord is a province in part hilly and mountainous, in part made up of barren plains. In the days of Palissy it abounded more than it now does in forest tracts, containing many walnut-trees, and chesnuts in such great abundance that they formed the staple food of the poor natives. These chesnuts also aided in the fattening of herds of pigs, whose noses were at all times prompt to perceive where truffles were concealed under the light soil within the forest. The wealth of Perigord depended on its forests and its pigs; in an inferior degree, on oxen,

upon vineyards, and the oil extracted from its nuts. Its truffles were then, as now, an appreciated luxury ; and perhaps the notion of combining with these dainties in a pie the excellent pheasants which are fattened in the truffle-yielding woods, had already dawned upon men as the great idea which was hereafter to make Perigord illustrious.

Over the vast heaths, and through the woods, and by the numerous river-torrents which the mountains pour upon the province, walked a free-hearted, clever, lively race of men. Hard and energetic as their dialect was their war-loving character, and good recruits were yielded from their number to the many armies called for in that period of troubles. Many armies had been marching into and out of France, hither and thither, during the period preceding the birth of Palissy ; moreover, since the consolidation of the monarchy, neglect had been suffered by districts distant from the central power—by Perigord and and its neighbours amongst the rest. Therefore, in the beginning of the sixteenth century traces of former cultivation were already beginning to be effaced, and the internal wealth of Perigord was rapidly decreasing.

Through Chapelle Biron flows the river Lade, a little tributary to the Lot ; the waters of the Lot flow into the Garonne. By these rivers the Agenois, the district submitted to the diocese of Agen, is made fertile. Physically, the Agenois differs only from its northern neighbour, Perigord, in having larger rivers, more vines, fewer hills, and a soil more uniformly generous. The barren tract about Chapelle Biron is not a characteristic of the Agenois, but, as before said, of Perigord. If, therefore, it was in Chapelle Biron that Palissy was born, it would please the fanciful to show how well he had been fitted with a birthplace. The variety of scene, the combinations of fertility and barrenness, would make a scrap of Perigord poetically fit to be the birthplace of a man who lived through scenes of intense contrast ; who was free-hearted, clever, lively as men are who play upon the heaths when they are children ; who was grandly energetic, and if not delighting in war with men, warred against difficulties in the way of knowledge with a heroism that communicates even to the baldest records of his life the colour of romance.

By simple misconception Palissy has now and then been chronicled in dictionaries as a native of the town of Agen. Some hamlet of Agenois was probably his birthplace ; but the evidence in favour of Chapelle Biron is insufficient. It is no more, I believe, than this : that there is at Chapelle Biron a kiln, bearing the name of Palissy ; and that a family with that name, supposed to be descended from the Potter, had for some time resided on the spot. Now we know with certainty that the father of Palissy could not have been a potter. Bernard himself tells us, that when he commenced his own experiments in pottery he "had never seen earth baked ;" therefore his father's livelihood could not have been drawn out of a kiln. The existence of a Palissy family upon the spot may make it probable, that among the descendants of the Potter, who had many children, one settled at Chapelle Biron, following in a rude way the calling which had made his family name famous in the history of art ; but it does not prove that Bernard was born at that place. Still, therefore, the doubt must be allowed to hang about this portion of our subject. Of some of the grandest rivers which fertilise our world, the source has been for ages undiscovered—of many even the existence was for centuries unknown, except to the few dwellers by their banks.

Concerning the parentage of Bernard Palissy, we can, I think, safely infer one or two leading facts. The business to which he was educated was that of a glass-painter, and worker generally in painted glass. Painted windows were formed both after the manner of mosaic-work (which had originated the invention), by the artistic combination of fragments of glass differently coloured, and also by the fixing upon sheet-glass of pigments laid on with a brush. Glass-making, and all the processes connected with the shaping and colouring of glass, belonged to the art of *Verrerie*, which was accounted in the days of Palissy, and long before and afterwards, an honourable occupation. Not honourable or worshipful in the vague sense employed by our own trading corporations, but literally an occupation which a nobleman might follow without loss of caste in the eyes of a punctilious community.

There were two or three such noble trades, and there was need of them. Penny-needing nobles swarmed formerly in France, as they do now in Spain or Austria.

They were born to the right of talking big and eating little. They received a birthright, and paid for it with their potage. For the benefit of such men, or rather for the benefit of the order to which they belonged, and to prevent these ragged nobles from breaking down the platform which elevates men noble by their birth above men noble by their honesty, it was from early times thought prudent to honour one or two trades, by allowing noblemen to get their bread in them without a loss of dignity. Thus glass and glory came to be akin. I mean, of course, the glory which consists in a nobility by right of calfskin, as separated from and lifted over a nobility by right of soul. Some satirists, no doubt, suggested glass as a fit substance to be paired with glory of this kind, since both were blown after the fashion of a bubble, both could be seen through by a man with healthy eyes, and both required forbearance in the handling.

The infusion of nobility into the glass trade led to a belief, which has been to this day maintained in many places, that nobles only were permitted to engage in this employment; that they transmitted the trade to their children, and allowed no new business to be opened by a stranger unless he produced his patents of nobility. By law this never was the fact; by custom it appears to have been the case, however, in a few districts, while in others glass-working was practised by men who had not the immunities of the noble class, and certainly did not acquire them by virtue of their occupation. The practice of *Verrerie* was in fact honourable; it might be practised by a noble without loss of caste, although it did not elevate men out of lower classes, otherwise than by associating them with what was thought to be a gentlemanly occupation.

Poor nobles, labouring for food as glass-workers, taught the trade to their sons; and as few who laboured would be willing to communicate their secrets to strangers, in whom they had not the interest of near relationship, it will be more especially true of glass-workers, as it was true very generally of most trades formerly, and is true rather generally now, that the occupation of the father comes to be the occupation of the son. Bernard Palissy we know to have been born poor, and to have received in his childhood no more than a peasant's education, except that he learned to draw and paint on glass. We cannot

err much in inferring, therefore, that his father was a glass-worker. Additional testimony is, however, furnished by the fact that Palissy, himself bred to *Verrerie*, apparently believes the art to be confined to nobles. He speaks at all times, not from books, but from experience. We may then with certainty, perhaps, infer that he himself belonged to one of the innumerable families of petty nobles ; and in that case, undoubtedly, the trade to which he was educated he acquired from the instructions of his father. Writing in later life, Palissy says :—

“I beg you to consider awhile our glasses, which, through having been too common among men, have fallen to so vile a price, that the greater part of those who make them live more sordidly than Paris porters. The occupation is noble, and the men who work at it are nobles ; but several who exercise that art as gentlemen would gladly be plebeians, and possess wherewith to pay the taxes.”

Of these glass-workers, living more sordidly than Paris porters, we have accounts somewhat more recent than the time of Palissy, which do not indicate that they improved in their condition. The fine gentleman who travelled out of town, found, buried in the gloom of a wild forest, men whose sylvan solitude he celebrated in the cant phrase of his day. The simplicity, the candour, the remoteness from men and the propinquity to birds, enjoyed by the glass-workers in the great wood, were duly envied by the little gentleman, who nevertheless would have felt, as against his own person, the suspicion of simplicity to be an insult, and who did not venture to be candid even to himself. The gentleman to whom it was a glorious birth-right to be idle, professed to admire the painful toil by which the rough men in the woods earned their exemption from the vapours ; and never could the head under a wig forget the day when, for some festival, wild hair was combed, and rugged beards were shaven, by the mirror of a pool in the recesses of the forests—when, rudely accoutred and after an antique way, the knights of the glade made holiday, and bowed, like creatures out of Ariosto, at the feet of the wild beauties of the hamlet. The forest chase of a wild dinner, and the red glow of the furnace after sunset upon moss and bark of trees, supplied the traveller with themes for a sickly, tepid eloquence, which

leaves, after evaporation, a distinct trace of nothing but the fact that the glass-workers were miserably poor.

The furnaces and hamlets of these people were generally to be found in the recesses of a forest, and for the choice of a situation of this kind good reasons existed. At a period when domestic buildings were much more combustible than they now are, the existence of glass furnaces within a town was a decided source of risk. It was the banishment of glass-huts from the town itself, in the year 1291, which caused the establishment near Venice of the famous glass-works of Murano. Glass had been made in Gaul from the remote time of the elder Pliny, and the French did not neglect those measures of precaution which were thought requisite in other countries, and of which we find records at a later period in London also. Moreover, to the glass-workers themselves, when wood was their fuel, and the ashes of certain twigs, and of fern, were used as an ingredient in their manufacture, it was more convenient to build their workshops in the wood, where articles of which they were in daily want surrounded them, and they were saved much loss of time, or much expense of carriage. For this reason, either scattered or singly, or collected with the dwellings of their owners into little woodland hamlets, the fires of the French glass-workers were lighted, in the days of Palissy, most frequently in the recesses of a forest.

Very reasonably, therefore, we may suppose that in a hamlet of the kind thus indicated Palissy was born ; that as a child he rolled upon the moss and ripened with the chesnuts. Bits of coloured glass held a high place, no doubt, among his early toys, and some of his first lessons must have been those which taught him to distinguish between certain minerals, by the burning of which upon its surface glass was coloured. Of the learning of his day none was communicated to the child. The invention of printing had revived letters, and created with the power the desire to read. Italy excepted, little literature had been then added by Europe to the stores of history, philosophy, and poetry bequeathed to us by ancient Greece and Rome. Whatever folly may attach in our own day to an exclusive study of the ancients, borrowed from our forefathers, to the neglect of better things, that folly is not to be ascribed to our forefathers themselves. Before they

had the minds of Shakespeare, Goethe, Molière, Cervantes, Humboldt, and some thousand more, to study, it was in Greek and Latin that they had to seek the highest, and, with some obvious exceptions, the only literature which tended to the education of the world. The degree of familiarity with Greek and Latin was therefore the test of education in the time of Palissy, and fairly so. It has continued until lately the test, even in our own day, because we idly followed an old rule, after the reason of it had for years departed.

Palissy afterwards, conscious of his innate strength, a little gloried in his want of Greek and Latin. But he has not yet learnt, perhaps, that languages so named exist. For now he plays before us as a child, busy beside the forest brook, or pondering upon the structure of a chestnut. The child, exchanging hours of reverie for madcap freaks and noisy pastimes, follows now the impulse of a mind created to be thoughtful, now the promptings of a lively laughter-loving temperament, which works upon a body gifted with the fullest health. Knowing what fatigues and what privations swept over that body, and left it in possession of a vigorous old age, we guess how the rich blood could tinge its cheeks in the first days when it still had few pursuits more troublesome than butterflies to chase. Knowing that, throughout life to the last, and at a time when others often sink into mechanical existence, Bernard Palissy retained a quick eye, a clear head, and a clean heart; keen to detect truth, and fearless to maintain it; simple as a child, and playful as a child, for fourscore years; we guess that in his boyhood he could romp with vigour when he was not in the mood for reverie.

But it was not all holiday to Bernard in his youth. Whether the child learnt that lesson, escaped seldom, which is taught within the walls of home, when lips which have been shaped a thousand times to kisses, model in clay the last smile that can only rot, we have no means of knowing. But the knowledge of the father, that is to say the knowledge of a glass-painter, was transmitted to the son. Bernard learnt to read and write. The minerals employed in staining glass, and some few of their properties, had to be learnt also, and they made up the child's first lesson in chemistry, a science which he afterwards—in Nature, not in books—pursued with ardour.

An unconquerable spirit of inquiry, and a determined freedom in obeying its dictates, were inborn elements which would display their rule over the child's mind as clearly as they asserted afterwards their sway over the man. We use our fancies very little if we picture the boy Bernard fingering his father's drugs, and asking questions concerning them, which since his father cannot give sufficient answers, he walked out into the wood to think over, or ask again of Nature, in whose language (richer than the Greek or Latin) he was then beginning to be versed. Digging, to ascertain what minerals his native earth can yield, combining, roasting, and experimenting, we may fancy the boy happy; and we cannot reasonably think that he omitted such amusements. Again, the business of the glass-painter requires that he should paint from certain patterns placed under the glass, or work according to a given plan, unless he should himself be able to originate designs. However the case may have been with Palissy the father, Palissy the son was not content to copy plans and drawings, without labouring on so that he might become himself an artist. The diligence with which young Bernard practised drawing during these first years had a marked influence over his career in after-life. Nature supplied him with his copies: the trees of his own wood, adjacent rocks, the birds, the lizards, or his mother's face, were at the same time the most convenient and the most welcome objects to a draughtsman whose appointed volumes were the works of Nature, and whose chief delight was a minute observation of her ways.

Thus, then, it came to pass that Bernard Palissy, by the time he had grown lusty, and acquired a down upon his chin, was qualified not only to assist his father in the honourable trade of *Verrerie*, but was at the same time skilful to gratify the vanity or affection of his neighbours, by painting images of them, or of their houses, or whatever other things they loved, on sheets of paper. But the trade of glass-painting, which had borne good fruit not long before, was at that time falling rapidly into the yellow leaf. The son, upon the boundaries of manhood, with the hopes of life before him, capable of independent toil, was out of place as partner with his father, in a business that provided to a single household

scanty sustenance. Nor in the present instance did so listless an arrangement suit the mind of a youth eager to see and learn.

So soon, therefore, as his limbs were duly knitted, and his mind was strengthened into capability of separate existence, Bernard Palissy, aged about eighteen years, shouldered a scanty wallet, scattered his farewells through the native hamlet, and marched out of it, to find his own position in the world.

CHAPTER II.

THE GREAT WORKSHOP: ITS WARS.

WATCHFUL of lizards, a warm friend to trees, a studious traveller in stony places, which to his eye were not barren ; contemplative, cheerful, simple-hearted, Bernard Palissy passed out of the cover of his native wood, loitering to examine nettles by the wayside, or to put some oddly-fashioned stone into his wallet. It was the time when the ambition of two princes, whom it is customary to call great—Francis I. of France, and Charles V. of Spain—had led to the tumult of an idle conflict, in which one half of Europe was involved. Two hundred thousand lives destroyed, and the ruin of a million of families, left to these two great men, when their rivalry was over, no gain but repentance. So Bernard, stout and vigorous, entered a world in which there was provided ample field for military glory.

I think it necessary to a proper understanding of the character of Palissy that the story of his life should be connected with some recollection of the age for which he worked. He was before his time, how much so they only can perceive who know how men were accustomed to think, speak, and act during the sixteenth century, and have acquired this knowledge from a little study of contemporary records. Bernard Palissy, as we shall hereafter find, was influenced by all that he saw, in harmony with all that he thought true, and at active war with all that he thought false. Though often labouring uncomprehended and alone, far in advance of all his neighbours, he being truly a great man, could only feel and act as one of a community. It is impossible, therefore, to have more than a very vague notion of the true worth and significance of what he did, if we abstract him from the world in which he laboured. We must see him in the place he occupied among the men by whom he was surrounded, and so fairly measure his work against theirs.

Blaise de Montluc, for example, was, in accordance with the spirit of his day, a perfect soldier; he was nothing else. To him a day of peace brought more vexation than a year of trouble. Strife was his rest; and his religion—for in his military way he was very religious—was the notion that he had a God, whose business it was, if paid sufficient wages in the way of vows, to help him in the day of battle. At the age of seventy-five, compelled to superannuate himself, lame, as he says, in almost every limb with pike-wounds and the wounds of shot, the old man closed his life with the recital of his history. The face that bent over his paper was made ugly by a harquebuss, whose shot had left in it a running sore, apparently incurable. The stump of the man of battles, having thus, at the age of seventy-five, superannuated itself, dictated or wrote the story of its past life, and has left complete those "*Commentaries of Montluc*," which Henri IV. styled "*The Soldier's Bible*."

Montluc was, by eight or ten years, older than Palissy and had been at work in the great world, seeking joy and profit in its ferment, while Palissy yet dwelt as a child in the seclusion of the forest. Of the court politics Montluc knew little, Palissy much less; nor is it requisite that we should place ourselves at any distance from their point of view, in looking at the turmoils of society. The mean and wretched selfishness of kings in those old times concerns us only here in its effects. The royal motives, and the royal glories or disgraces, may be found by reference to any history of France. When Palissy sat down to gossip with the crippled soldier in his cottage or trudged with him upon the road for company, so far as their two ways were one, what sort of narratives instructed him in the world's doings at that time and for the few preceding years? Montluc returned among the cripples, and what his tale would have been we know; therefore we need feign nothing, but soberly relate Montluc's view of the world, which Palissy had come forth to encounter.

Montluc was, in 1528, a young soldier, aged perhaps about twenty-seven. His house was noble but impoverished. Bred as a page in the house of the Duke Antoine de Lorraine, he had become, in the next place,

archer of the duke's company, having M. de Bayard for his lieutenant. Rumour, however, brought him tidings of the noble deeds that formed the daily run of military life in Italy, and Montluc had a mania for laurels. He went, therefore, to Gascony, and obtained equipment from his father, with a little money and a Spanish horse, on which he galloped forth in search of fortune. He had not travelled a day's journey from his father's house before he met the Sieur de Castelnau, an old gentleman entitled by experience to give him copious information on Italian matters, and communicative as old gentlemen are apt to be. Montluc spurred on and crossed the mountains, hurrying to Milan. He was then seventeen, and had his career before him ; as now at the same age Bernard Palissy is entering on his.

Two uncles by the mother's side, named Stillac, welcomed young Montluc ; and one of these two uncles serving M. de Lescun, who was brother to M. de Lautrec, marshal of France, Blaise de Montluc was entered as an archer in his company. Among these common archers there were not a few born gentlemen. The war on this occasion lasted twenty-two months, and young Blaise, who knew it was necessary for a soldier to display as soon as possible his quality of stomach, fought so diligently that five horses were killed under him in ten days, besides that he was once made a prisoner and ransomed by his comrades. Montluc was in the battle of Bicoque, where he saw M. de Montmorenci, with whom afterwards, when constable of France, Palissy became acquainted, struggling on foot.

After the loss of Milan, Montluc returned to France as man-at-arms and archer in the army of Lautrec. The Spaniards soon formed a party for him, and Montluc's next day of pleasure was a battle at Saint Jean de Luz. In that battle, among others who were struck down was M. de la Faye, of Saintonge, afterwards a friend to Palissy. The French had very much the worst of the entertainment at Saint Jean de Luz ; they were routed, and would have suffered most severely from the Spanish cavalry if Montluc had not, in the teeth of cautious counsel, inspired a hundred cross-bowmen on foot with readiness to follow him and check the fatal movement. These hundred men took cross-bows ; for at that time (in

the year 1523) there were no harquebusses in the nation. Six men with harquebusses (Gascons) had, however, only a few days before deserted from the enemy, and coming to Saint Jean de Luz, had found on guard at the town-gate Montluc, who impounded them for his own service. The cavalry was charging down on the small body of foot which interposed itself between the Spaniards and the routed French; Montluc, when they were very close, ordered his archers to aim at the horses' heads, and fifty horses fell. The perilous retreat of Montluc's band, cut off from their friends and hunted by the enemy, was a notable affair. The young soldier performed his service and brought back his men, four only being missing. Lautrec, who was a reserved man, too rarely given to praise, rewarded Montluc on that occasion with expressions of his favour.

The camp of the Spaniards having retired, part of Lautrec's army was disbanded, and Montluc, then twenty years of age, was put over the company of his late captain. The Spaniards, altering their minds, advanced and took Fontarabia. As for Montluc, his duty making him a dweller in stone walls, to which life he was as hostile as the savages of old, he declined the ignoble position, and travelled off to Italy again, where the revolt of M. de Bourbon had lighted up the blaze of a more thoroughly delightful hell. Thither Montluc went, since he could get no regular engagement as a volunteer, accompanied by five or six young blades whom he had picked up on his road. These all served under Captain Castille de Navarre. Thus it happened that Montluc was at the siege of Pavia, and at the battle on St. Matthew's day. It was a pity that King Francis, just before this battle, had dismissed, through motives of economy, three thousand Swiss under their Colonel, who was called, commonly, "*le Grand Diant*."

The aid of *le Grand Diant* ought not to be dispensed with in such undertakings as those which formed, three centuries ago, the foreign policy of European states. The result of the battle was the capture of King Francis, and with him, among other gentlemen—of some whose names will occur elsewhere in these pages—M. de Montmorenci for one. Montluc, also a prisoner, aged twenty-three, was ordered, with all others of his

kind who were too poor to provide ransom, to quit the camp and find his way to France.

How King Francis went as prisoner to Madrid, what he did there, and how he came to France again, are questions in which we are not concerned, except so far as to state that when he did get home, Montluc was soon emancipated from the bonds of peace. Being required to raise a troop of foot in Gascony, he marched at the head of eight hundred men for Italy, having among his troop four or five hundred *harquebusses*, though there were still scarcely any of those weapons used in France. The old man, when memoir writing, wipes his ulcerated face with a stump of a hand, and abuses *harquebusses* heartily. The young man, having got to Italy, was soon shot in the leg; and being lamed for a season, was not at the siege of Pavia. He followed the camp on a litter. His Gascons had been divided, and he himself left commander of four hundred. Being recovered from his lameness, on a certain occasion the French came before a small town named Capistrano, situated on a mountain. Two breaches had been made in its walls, each of them only large enough for the admission of a single man. Montluc was ordered with his troop to force the town.

This happened about a year before the date of Palissy's first march into the world. Although very much condensing Montluc's story, I will, nevertheless, leave it to be told in the first person.

"Count Pedro of Navarre bade us to storm the town. I had long panted for the day when I might be the first to enter by a breach. The time was come. I shouted to my men to follow closely, and rushed through the wall, with a coat of mail upon my body, such as the Germans wear, a sword in hand, a buckler on my left arm, and a morion on my head. The breach made entry into a house, and the enemy had torn up a number of the planks just overhead, and piled a mass of stones upon the upper floor. I leapt in quickly, but as my lieutenant followed, the stones were shot down, hurting some men and partly closing up the entrance. None could follow; but I did not notice this, as I ran on to the door leading to the street. That was defended by the enemy, and while I fought them, the men from above fired down upon me through the reft in the ceiling with their *harquebusses*. A

shot pierced my buckler, and cracked my arm ; the next shot splintered the bone at my shoulder on the same side. I dropped my buckler, and my arm seemed to be gone ; I could not feel it. Then, seeing that I was alone, I fought my way back to the breach ; and no sooner had I put my feet outside, than my men, who were there, seized them to assist in extricating me. They dragged me out with such good-will that I was shot down to the bottom of the town trench, where I fell upon the ruined stones out of the wall, and broke my lame arm in two other places. Then, when I recovered from my swoon, and saw my men about me, I reproached them ; and my lieutenant said he would go through the breach, or die. Ladders were got and tied together. My men formed two parties. Both breaches were assailed ; and when one was taken, I bade my lieutenant, La Bastide, take good heed to prevent as much as possible the girls and women from being violated, because I had made a vow to our Lady of Loretto that I would spare them on the first occasion ; for which reason I expected divine aid. Fifteen or twenty were brought to me, but all the rest were lost. My men could not be restrained ; and out of love to me, and for the pain I suffered, they left not even a child alive. They then set fire to the town ; and although the bishop of the district pleaded to M. de Lautrec, they would not rest till it was all reduced to ashes.

“Then M. de Lautrec sent two surgeons, Master Alême and Master George, to see me. They said my arm must be cut off. But there was a young surgeon, who had served M. de Bourbon, who was my prisoner, and whom I had about me ; he advised me by no means to let that be done. M. de Lautrec commanded me to have my arm cut off, and promised to care for my fortunes. The surgeons came with their tools, and I would have submitted, but the young surgeon, standing behind my bed, continually urged me to refuse. So I refused. The surgeons went and told M. de Lautrec, who said he had just been thinking that it was best such matters should be left to God ; and bade them examine my prisoner, to see whether he was versed in surgery, and if so, to commit me to his care. He bore examination well, and thereafter I lay on my back for two months and a half, in a house at Termes bi Bressi, where, to ensure my being cared for, two chief

citizens and the brother of my host were taken as hostages, with a promise that they should be hung if I was not made comfortable. Certainly it was not their fault that, from lying on my back so long the flesh all rotted from my backbone.

"Nevertheless, for my comfort, Count Pedro de Navarre assigned to me a handsome portion of the enemy's land, which had been confiscated. I had the Tower de la Nuncide, the first barony of Naples, with twelve hundred ducats of income. A notable prize that would have been, if we had held our ground in Italy. They were endeavouring to subdue Naples by famine, but our galleys failed us, and the sea was open to the Neapolitans. Then came the Prince of Navarre, and from the time of his landing all good luck deserted us. By that time I was able to get about with my arm in a sling, and do some service with my men. By chance I saw a body of Italians stealing from the town-gate, to surprise the prince when he was disembarking. I succeeded in conveying warning, and a vessel coasted on to overlook the road and act on my intelligence; but the men in the vessel no sooner caught sight of my troop of harquebuss men, than they took for granted we were enemies, and opened fire upon us with their cannon. Two men were shot down close beside me. Of one man, whose head was split open, the brains were dashed into my face.

"To save ourselves from our friends we took shelter in a trench, and presently the enemy defiled along the road before us. We fired upon them, and effected a diversion. The Prince of Navarre, having landed, scampered for his life to reach the camp, whither I and my men retreated, and, entrenched behind the wall on each side of the camp-gate, we defended the position for a terrible half-hour. At last the enemy retired; and I, who had been able only to instruct my men, too weak for fighting, was leaning exhausted against a bank, when I heard the high officers talking as they pointed to me, and saying that they owed much to the young man with the crippled arm, and those who had come newly to the camp inquired about me. That was my reward.

"But the Prince of Navarre brought us bad luck. Misfortune followed on misfortune. We lost our best men, M. de Lautrec among others; and I travelled home to

Gascony, for the most part of the way on foot ; so did the other soldiers who escaped, but they were very few. The journey was a weary one. I had about me more than thirty ells of taffeta, by way of bandage to my arm, which was supported in a sling, and bound fast to my side. All my companions and friends were dead, except M. de Monpezat and poor Don Pedro, our colonel, who was taken prisoner ; and he, I learn, has lately been beheaded. Therefore I am come home to my father's house in Gascony, which in these days is poor enough ; and when my arm is healed, as I fear it will not be for the next three years, I shall set out for the camp, and so begin the world again."

This, then, was the complexion of a soldier's tale, when Palissy came out into the striving world. And with such tales he must have received testimony to the vices of the camp. A war for liberty or the defence of human rights against aggression may evoke high thoughts and virtuous emotions ; but the wars were base of which we are here speaking, and they fearfully debased the men who were engaged in them. From King Francis, who after a triumph insolently consented to ordain thanksgiving to God, "because he had proved himself a proper Frenchman," down to the meanest soldier, blasphemy was common. Gambling ruined many officers and men. Drunkenness, begetting insolence, caused captains to cut and hack the bodies of their men not rarely, and their cruelty made the assassination of an officer by his own men to be no strange event. Montluc, in the course of his experience, had, with his own eyes, seen four commanders cut down from behind by their own troops.

CHAPTER III.

THE GREAT WORKSHOP: ITS HOMES.

IT was well for Bernard that he had not to depend on glass-painting alone for a subsistence. Work at a church-window was not to be found in every town ; and although there were few noble houses at that time in France which were not decorated with a rather free display of coloured glass, yet, unluckily, the noble tenants were beginning to discover that their painted windows were domestic miseries. They had been, of late years, greatly in fashion. The works of Jean de Bruges, Michael Angelo, Raphael, and Giulio Romano, had been assiduously translated into glass, for satisfaction to the luxury of wealthy men. Even in our own days, any mania for painted windows in a dwelling-house would have within itself the elements of speedy cure ; what it implied, however, in the sixteenth century will soon be seen. Palissy, therefore, setting out into the world as glass-painter in a year that was on the wrong side of the climax in the public taste, found it not very easy to exchange his painted glass for bread.

Palissy wandered on. What tales the soldier had to tell of foreign warfare we have seen. If he spoke to a tradesman he would hear about home miseries, and learn what was the meaning of that constant sound of the wood-cutter's axe and crash of fallen trees which filled most of the forests across which he had to journey. This, for example, is part of the narrative put into a Draper's mouth by a contemporary writer, Regnier de la Planche. I cite only such matter as directly illustrates certain opinions expressed very earnestly by Bernard in his later years ; opinions that must have been based mainly upon the experience acquired by travel.

" Monseigneur the Cardinal de Guise—you cannot walk far without stumbling on a benefice of his. He sets a bright example to the Church. There was no need of it. Round Paris, where I live, the woods are swept away so thoroughly

that the increased cost of firewood is a tax upon the poor of one-sixth of their income. My Lord Cardinal de Guise sits like an owl upon his perch to watch for the leanest mouse of benefice. Is a living vacant, though its value be a footman's pay, it is solicited for my lord cardinal. The rich incumbents are watched greedily, or hurried out of their possessions prematurely, forced to share their livings, or bought out of them if there be wood enough to fell for the payment of the purchase money. So Monseigneur the Cardinal has gathered livings; and when he has despoiled them of their woods they have been thrown to the first comer of his varlets or his prothonotaries, as we fling bones to dogs when we have eaten all the meat from them, and sucked the marrow."

Are not the treasures of the Church in heaven? If such things be true, can men look every day upon the scandal, and not seek to bring back those offenders to a sense of justice. Upon this head the Draper spoke with emphasis.

"Men do not see their souls. Oh, if the cloak worn by my lord the cardinal had in it as many pieces of different colours as he has benefices and different orders and institutions, how ugly and disgraceful he would think his garments! The cardinal loves better that the ugliness and infamy should be his own, and be unseen, than that his cloak should be accused of it in public. Do you know how many beggars ask for alms now in the country, who used formerly to live in peace, and pay rents? The poor man, who used to keep two or three cows, pigs, or sheep, feeding them in the public woods, and feeding his own household with their increase, has his pasture-ground robbed from him. The poor among us have no more fat cattle, no more wool to sell, no more manure to put upon their plots of ground. The woods are felled by peers and abbots, and the ground of the poor man is rented to the plough at a high rate, and with a cruel claim for entrance-money.

"I ask," said the Draper, warming into indignation, "to whom do these waste lands belong?—to the people or to the king? If they belong to the people, then it was cruelty (I say no worse) to rob them of their heritage. But if they were the king's, they were part of the domain pertaining to his crown; to other rights of his they could

not appertain. If they belong, then, to the crown domain, alas ! gentlemen-peers of France, where is the oath you made, and swore so solemnly on the altar at the consecration and the crowning of the king, to preserve and maintain his domains ?—where is that which you swore should not be alienated ? If you do not fear God by whom you swore, nor love the king to whom your vow was pledged, at least say why you have abandoned fear of shame, and the reproach of man. It will descend upon your tombs.”

One spoke thus who had seen much of France, and knew these things. But if these things were so, the peace of nature was not in the hearts of men. There were wide clearances in almost all the woods, and to the mind of Palissy—born lover of the fields—the fallen bodies of the trees which strewed the ground must have been a sight far more pitiful than to Montluc’s eyes were the human bodies on a field of battle.

“ I have seen much of France and know these men,” the trader said. “ My business has carried me abroad, especially to Germany. I was long in Lorraine ; I have seen France ; and as for the affairs of my own town, I have studied them. Our state of trade gives us a great intercourse with people of all classes. No others have equal means of residence and traffic among foreigners ; can win so well the attachment of foreign kings and princes ; know the news of foreign courts, their enterprises, and their tempers. Our experience causes us to be sought even by statesmen, and our traffic is a noble occupation, for we succour our own land with the blessings which were given to another. That way our gold and silver comes, we make none poor for the increase of our houses. What man is there who acquires wealth better or more honourably than we traders do, whose profit comes through the convenience of all, by our own industry and labour ? The soldier risks his life ; we trade through war and peril, risking not only life, but also wealth.”

Palissy, as a glass-worker, followed a noble trade, but to the free mind of the Draper, trade appeared as noble in all honest forms.

“ Trade in itself is noble,” said the Draper. “ The wisest men, and the men most celebrated for their virtue, have been traders. Thales, the first of the Seven Sages,

was a trader ; Solon, second founder of Athens, was a trader ; Hyperates, the mathematician, was a trader. The renowned Plato, called, for the excellence of his wisdom, the Divine, paid the cost of his travelling to Egypt by the oil he sold there. In our own day we have a Kerver, a Merlin, a De Pleurs, honourable traders—there are my excellent friends, Nicolas Bourgeois, Jean Messié, Henry l'Avocat, Jean Aubery, Nicolas Hac——”

Does any one know as much of Nicolas Hac as of Plato, and admire the Draper's learning, his retort is ready.

“Never shrink,” he says, “before a bit of Latin. Look more at the man than at his habit ; substance rather than words. Moreover, I am not a lettered man to make you a harangue ; I was not formed for it in my youth. At ten years old I was sent to college by my father. All the science of that time lay in making what we used to call *carmens* and Latin verses. I made good ones, so my master said ; and Heaven knows what poets my masters were. Even my father was pleased with my verses, though he understood them no more than I suppose you can understand high Dutch. At fifteen the poet was brought home to the shop ; for the good man always had intended that I should pursue his way of life. Then all that I had learnt with pains and trouble in five years I forgot over diversion in one month. My verses returned into the earth out of which they sprang ; for they were not current in business. So I spent five years in learning what I was not to remember.

“But since then the goodness of God has been displayed by the hand of our King Francis, the first of his name, who draws, as from a tomb, sciences, arts, letters, and good discipline ; and by the aid of an Amiot, a Jacques Colin, and many others, the tools of wisdom are made sharp in our own mother-tongue ; so that there is no artisan who may not in a few hours become wise, if he will use his leisure. Our shops may be our schools.”

To this argument I know in what spirit Bernard would have answered—I should wish the world to be my shop. I do not know how long it may require to learn all that men know, and how much more time it may need to unlearn their mistakes in knowledge. I feel that earth and air are full of mysteries and wonders of the sublime wisdom of God.

"But," says the Draper, "you will find all things written in books. With a book we travel for nothing throughout all the regions of the world; we mount with faith to heaven, and descend with security into the abysses; we dive into the whirlpools of the sea, plunge into the midst of battles, capture towns, engage with brigands, and do anything, in short, without lifting a foot. That which long age, hard toil, and heavy experience formerly brought to a man only at the hour of death, our children (so to speak) may suck from the teats of their mothers and their nurses."

And yet men knew little more of a rock than that it was stone, and that it was there because it was placed there in the beginning. Such was the talk of the day among merchants and men of the middle class when Palissy went out and saw the world of France. If he was invited as a glass-painter to exercise his art upon the windows of a country mansion, in what sort of home did he find its possessor living? His commonest experiences would have been of this kind.

First he had to cross the stagnant moat, which coiled like a green snake about the mansion. Chamber-windows opened over it, and sleepers breathed its exhalations. Within the circle of the moat rose an unwieldy mass of scattered towers, round and square, connected, without any reference to symmetry, by massive walls. The thickness of the walls was visible in the deep setting of their eyes, their little windows and large windows, nearly all of which wanted the brightness proper to clear glass, and had that dull fishy look peculiar to painted windows seen from the outside.

If then admitted to the lord or lady of the house, he was led over cheerless floors, through thick walls and massive doorways, along passages but dimly lighted. Men were not then distant from the day when right hands—weapon-hands—were grasped ungauntleted, in sign of friendship and assurance that the friendship was sincere; an act that is in our day reduced to the polite form of a punctilious pulling-off of gloves. Architecture, also, had not then escaped the influence of monkish tutelage; and the mansions of noblemen, whether their town-houses or their country-houses, were buildings of the character here indicated. They consisted of strong towers, with high-

roofed halls connecting them, never symmetrical in town, and in the country, interspersed with stables and such rustic offices, including also a walled garden. Where the country-houses were erected on comparatively level ground, it was thought prudent usually to surround them with a moat ; but many were erected upon rocks, or in positions naturally fortified.

Then, as to the connection with these places of Palissy's own trade, the effect of painted glass upon the halls and chambers of homes so constructed was to fill them with an aggravated gloom. The loss of sunlight was unwholesome, but that was not by any means the only evil which experience discovered. Light sashes and well-fitting window-frames did not exist as a source of household comfort. Household discomfort, on the contrary, was caused by the flapping, in any high wind, of the windows that had hinges, and the destruction of their panes of glass. Breakage of painted glass being expensive, painted windows were in most cases fixed into the wall—not made to open, and excluded, therefore, air as well as light.

CHAPTER IV.

THE GREAT WORKSHOP: ITS PHILOSOPHERS.

WANT of the necessary knowledge renders it impossible for us to trace year by year the path of Palissy, during the nine or ten years of wandering which followed his first departure out of home into the world. It was to him a period of education. The frequent reference to the Ardennes throughout his works shows that he must have spent some time in that corner of France most remote from the Pyrenees ; while in the upper Pyrenees, at Tarbes, he tells us that he spent some years. From Antwerp, in the east, to Brest in the most westerly parts of Brittany ; from Brittany to the Pyrenees, along the southern coast, through Montpellier and Nismes (both of which towns he mentions) ; across France between these extreme points, and through Limousin, Perigord, Auvergne, Berri, Burgundy, Champagne, the extent of the travels of Palissy may be traced without difficulty in his writings. He watched the vapours in the Ardennes, noticed the petrifications there, and made observations of the soil, which led him to believe that mineral springs might be found in those mountains, similar to those which he had seen at Spa, and in many villages of the district of Liege. He noticed the corroded surface of glass used in the churches of Poitou and Brittany. In a little town of Poitou he seems to have spent some time. While at Tarbes he observed the fever that attacked all strangers who came into the district of Bigorre. He took note of the marble in the Pyrenees, and there also watched the phenomena that attended the rising and condensing of vapours and the formation of snow. He found crystal on the mountains of Auvergne. He qualified himself to describe the change of vegetation that is to be observed on traversing France from Paris northward or southward. " I under-

take," he said afterwards in one of his books, "to bear witness only about regions that I have frequented ;" and in all his travels he must have been a keen observer, for there is no quarter of France from which he does not appear to have carried away some fact that was of use to him in later years.

During these wanderings he lived by his paintings chiefly. His skill in glass-painting probably caused him to dwell, now and then, for a long period in some town where a church window or an abbey window was in progress ; and his skill in portrait-painting may have brought him, in some towns, an amount of patronage which made it prudent for him to remain, while there was anything to reap, upon the harvest-ground. Another means of livelihood consisted in his knowledge of geometry, and manual skill in the employment of a rule and compass. These instruments had come first to his hand as necessary in copying or inventing patterns for painted windows ; but Palissy never stood still in any branch of knowledge ; his eagerness to push attainment's constantly to higher ground, compelled him forward with the despotism of a passion. He became, then, as well acquainted as his means allowed with the geometry of his own day, and sought aid therein, as he could, from books. Such knowledge made him capable of measuring and planning sites for houses and gardens, of making for its owners maps of landed property. These talents yielded no return to Palissy of more cash than sufficed for his subsistence ; but they, doubtless, did enable him to travel without any sense of suffering from want, and they enabled him to spend such little sums of money as occasionally might procure for him the means of adding to his knowledge.

For his bread-earning talents, at this time, Palissy had not a great respect. "They thought me," he said afterwards, in his unaffected way, "a better painter than I was." He painted and planned that he might live, but he lived only to learn. His quick and indefatigable spirit of inquiry never rested during those ten or twelve years of wandering. He questioned men and Nature, both incessantly ; but Nature only gave him answers that could satisfy his shrewd and lively understanding. He investigated, also, arts of life, he studied monuments of anti-

quity, he visited the laboratories of Touraine, Poitou, and Anjou ; his curiosity for truth was universal.

His study of Nature must be dwelt upon hereafter when we count its fruits ; but there are external influences in society which act upon a character, as sun, and soil, and wind act on a tree, determining on which side there shall be most growth, and what shall be the prevalent direction of its branches. Since Bernard Palissy was one of those unwearied, nimble-minded men who have thoughts of their own, and thoughts of value, scattered about more fields than one of human intellect, in following his course we have to keep our own eyes busy. We cannot, therefore, pass over his first years of observation in the world without connecting fragments of experience notably diverse, and yet all-important to the full perception of his character.

Philosophers, of course, were to be questioned. Palissy aspired to know what could be taught by men wise in his own day about the rocks and woods ; his early familiarity with chemical substances used in the art of glass-painting, and the changes which they underwent when subjected to fire, had excited in his mind especial curiosity for knowledge that might be communicated by the chemists.

Philosophy, in France, was then ill represented. But during the same years which were spent by Bernard as a traveller over the face of France, another wanderer was shifting restlessly from town to town among the German states. That wanderer was Paracelsus, a man wiser in science than his generation. By dwelling briefly on the memory of this teacher's career, we shall recal sufficiently well to our minds the position of philosophy in Europe at the time when Palissy was seeking information in the workshop of the alchemist. We shall, at the same time, make acquaintance with a teacher of whom Palissy heard much, and whom afterwards he only mentioned with respect.

The Greeks and Latins supplied knowledge to that age, and even from the teaching of the Greeks and Latins many sound doctrines had been lost. In the beginning of the sixteenth century Aristotle was to the learned in Europe all in all. Pliny was then the leading naturalist, with a knowledge in advance of his successors ; Celsus was a text-book to physicians. Bombast von Hohenheim.

disdaining, somewhat angrily, the imperfect knowledge of the past, and really competent to forward science on the road up to a higher future, assumed, according to the learned fashion of his time, a name that indicated his ambition. He would advance beyond the wisdom of the ancients : he was—Paracelsus.

High in intellect and bold in innovation, much deficient in the philosophic calm and the simplicity of mind which we have noted in the character of Palissy, while Palissy, aged about twenty-one, was journeying through France, Paracelsus, at the age of thirty-seven, wandered, often ragged, about Germany ; a man beardless and feminine as to the fleshing of his features, yet with a power in the strange large fashion of the skull over his brain that removed from his aspect all expression of a woman's weakness. Man's weakness, too—man's privilege would be a truer phrase—was never to be betrayed upon his countenance ; fate had removed out of his heart the tinder which is lighted by the sparkle of a woman's eyes. Inflammable enough he was upon less gentle provocation. The want of self-command destroyed his chances of prosperity. He had travelled much in his youth, and had been educated carefully. He had studied alchemy under Trithemius, Abbot of Sponheim ; and chemistry—for the two studies were distinct, and even mutually hostile—at Schwatz, in the Tyrol, under Siegmund von Fugger, one of the chief chemists of a day when chemistry was little better than a rudely-shaped desire for knowledge of a certain class of mysteries in Nature. In the year before that which we have assumed to be the date of Palissy's first independent march into the world, Paracelsus had been made professor in his University of Basle. In a prospectus, more remarkable for truth than modesty, he had declared, that having been invited by a salary, he would daily, for two hours, discuss and demonstrate publicly the contents of books of medicine, physics, and surgery, whereof he was the author, to the great profit of his hearers. He had held his professorship only until the succeeding year. The value of his teaching men acknowledge now, who look back to him as the first introducer of mineral drugs into pharmacy, and as the first propounder of two medicines on which enormous reliance is to this day placed by the physicians—calomel and opium.

But there was at Basle a certain canon named Cornelius von Lichtenfels, who was afflicted with the stomach-ache; and the stomach-ache of Cornelius von Lichtenfels ruined the worldly prospects of a great philosopher. For the afflicted canon, who no longer dined canonically, had sought ease of the physicians of the town, and swallowed, as good patients ever ought to swallow, many quarts of potion. Then he applied to Paracelsus, who bargained to afford ease for the price of a hundred florins. The canon, having agreed to this, received three little pills containing opium. His pain departed; but since he was a man devoted to the ancient customs of the world, and had expected (as to this day patients often still expect) to get the value of his hundred florins in six hundred draughts and many mixtures, the canon, who desired to be elaborately, orthodoxly cured, refused to pay for three small pills—not even boluses—so large a sum of money as had been agreed. Paracelsus then sued for his fee before the arbiters of law, and was informed by them that he could not lawfully claim payment of the canon, except according to the custom of the town, by charging for his medicine; and it was well known that one florin would have been a high price for three pills. Thereupon Paracelsus, moved—as he was too often moved—to wrath, informed the judges so emphatically of his opinion of their sense, that, to avoid the consequences of his great contempt of court, he was obliged to quit the town. This was in July, 1528; the wanderings of Paracelsus then began in the same year to which we have referred the commencement of the wanderings of Palissy.

Everywhere testifying his great skill and genius, everywhere at war with men of science, who were too blind to perceive his truths, and too proud to endure his temper, fulminating manifestoes of incompetence against the followers he left at Basle, and his disciples elsewhere—right enough, no doubt, in fact, though wrong in feeling—Paracelsus buffeted his way through Germany from town to town. “Have no heed,” he writes, truthfully, bitterly—“have no heed of my wretchedness, thou reader; let me bear my ills myself. I have two sins upon me—my poverty and my piety. Poverty was reproached against me by a burgomaster, who, no doubt, had seen at Innspruck the doctors in silk clothes at the prince’s courts, not in

torn rags, a-baking in the sun. Therefore, the sentence was pronounced that I was not a doctor. For piety's sake, the preacher and the parson judge me, for I am not a votary of Venus, and have no love at all for those who teach what they never themselves do."

Paracelsus, thinking on before the world, laboured impatiently to beat into the slow understanding of his generation that which he vividly perceived as truth. Instead of using all the arts of generalship to act on the dull mass, he was as one man labouring to kick into activity a heavy army of dragoons. They turned upon him; and in nearly the same year when Palissy brought to a close the ten or twelve years of his wandering, and felt that the real labours of his life would presently begin, in about that year Paracelsus closed his wanderings in death, upon the pallet of a miserable inn, not fifty years of age, the victim of a violence which his own anger had excited. It is said by some that he had been severely beaten at the instigation of offended doctors and thrown from a rock; so that the injuries he suffered caused his death to follow shortly in the inn to which he had been carried. His skull became a curiosity; and a great physiologist observed in it some years ago, a crack, which he believed was the result of injuries inflicted before death, because after death bones do not part as those had parted. We may believe, however, that the skulls of men, like their reputations, when they suffer handling by posterity, are liable to many tumbles, many pickings up; and skull or reputation may at last receive a crack, of which, after lapse of time, it will be very difficult for us to say whether we get it cracked from its possessor, or whether it has been injured, in some stage of its transmission to us, by improper handling.

Yet although Paracelsus, with his own impetuous philosophy, had made bold strides in medicine, and pushed his science far beyond the science of his day, it needed calmness more than he possessed to separate the philosophic mind from gross and fanciful delusions common to his age. Instead of subjecting astrology and all its wonders to the test of a close reasoning faculty, and calling for witnesses to its truth, according to the simple-minded way of the untutored Palissy, the great physician was content to amplify its base, to lessen its absurdity by mending its proportions, and to adorn it with suggestions out of his

own ample mind. Accordingly, while Bernard Palissy, a youth, was visiting the alchemists, and penetrating their delusions with the clear light of his own home-bred reason, Paracelsus was at Augsburg, publishing an astrological prediction—a prophecy for the years 1530 to 1534, entitled “*Practica D. Theophrasti Paracelsi.*” The hieroglyphic on the title-page represented a military man, with a drawn sword in one hand, and a large buckler in the other, who stands on his head in a blaze of fireworks. He balances himself upon clouds, a great star blazes on his body, and light streams out of his mouth, irradiating a group of warriors of all nations, who stand below. A dead king, stretched upon a bier, is master of the foreground. The prophecy of Paracelsus boded a struggle between two mighty lords, with profit to neither—no very bold thing to foretel, considering the movements caused by the struggle between Charles and Francis, who were quarrelling and fighting like two angry boys, the misfortune added, that they happened to be kings, with nations to be torn instead of pinafores. “Trade,” says Paracelsus, “will suffer ruin ; no man will regard other than his own gain, and honour will be held in small esteem.” One might question whether Paracelsus went the whole way to the stars for that discovery ; but if he did, it is unhappily most certain that he might have spared himself so far a journey. Deaths of potentates, and other matters prophesied, did not take place. On the foundation of a false science, it mattered not how great might be the genius of the builder ; in the world of shadows, as we were told, long ago, by Mycilus the Cobbler, “there is no distinguishing the brown from the fair, for all is of one colour ; and who can see a difference between these rags and those robes worn by a monarch ?” The cobbler would paint quite as well as Zeuxis on a cloud, or raise as fine a work as Phidias upon a quicksand. There are, however, phrases in the “*Practica*” of Paracelsus which one might gladly wrest into the service of a modern meaning. Forgetting macrocosm and microcosm, one might apply to a new thought the sentence of Paracelsus, that, “those who would understand the course of the heaven above must not omit to recognise the heaven in man.” We may take also a disjointed sentence from the Augsburg prophecy, and fix it as a motto to the scientific spirit of its age ; “In the concealed lies

that which it is requisite to know." Men had not, at that time, learned that it was requisite to master thoroughly the known, and by a slow enlargement of its limits from within, to encroach upon the limits of the unknown. Philosophers spent labour on mysterious assumptions, and spent toil upon astrology and alchemy, as, in our day, philanthropists spend sympathy on Timbuctoo ; despising common information as too mean to dignify their calling, they bestowed their labour on a shadow with a name, and were very deeply imbued with a belief that it was only requisite to know that which was not known, and that what little happened to be already known was hardly worth acquiring. The extent, therefore, of the practical acquirements of a work-a-day philosopher in the year 1530, exception being granted for the men of genius—for Paracelsus and his like—was very limited.

The hardest worker was the alchemist, the profound adept, with eyes dulled by his furnace heat, and his whole body dessicated in a chamber furnished lavishly with furnaces, with sand-baths, with stills, crucibles, alembics, retorts, and receivers, and pervaded with a suffocating fume. Through such a fume the lean assistant might perhaps be dimly seen, and more distinctly heard in the convulsions of a cough, but at all times the dry old alchemist would be found, easy as a shepherd in the mist of his own mountain. In such laboratories, Bernard must have heard much that he could not comprehend ; for their masters plentifully mingled speech with words like those which Geber, in the seventh century, had given as a model of alchemic elocution, at the same time that he, perhaps, gave his own name to the future uses of the world, as the exponent of a style called, in his honour, gibberish. The alchemist was frequently sustained by other men's resources, for it would not seldom happen that, in a certain condition of the *sal sapientum*, the sun and flying dragon were so circumstanced, that a peer of France could be induced to speculate in their extrication out of difficulty. Many nobles, indeed, shared with alchemists, or practised by themselves the divine art—the chemistry of chemistry, distinguished above vulgar miscellaneous experimenting, as *al-chemie*. The resources of a peer were often crippled by his efforts to possess the universal medicine, not only for curing diseases and prolonging life by the imperishable

property of gold communicated to man's body, but also for transmuting into gold all metals.

"Give thanks," one of the great alchemists said, "to Almighty God, who, taking pity on human calamities, has at last revealed this inestimable treasure, and made it known for the common benefit of all." He was one of those who claimed to be an adept, a possessor of the mighty secret. In the days of Palissy, adepts were numerous, destitute rogues, who offered bait to their dupes by production of a silver coin, one half of which appeared, by dipping in some liquor, to have been converted into gold ; or a nail, of which the point was gold, and the head iron. The nail was a clever specimen of soldering ; the coin was of gold, partly dipped in quicksilver. If it was said to the adept, "Why are you, able to make gold, so poor?" his answer was, "I am not poor ; but were I to display wealth, and make known my power, I should become a victim to the avarice of men."

There were not wanting a few chemists of truer quality, who regarded alchemists as already victims of an avarice of their own, and laughed at them for seeing the perfection of science in the solution of a single problem. They said that for the preceding seven hundred years, at least, men, who should have been advancing sciences, had been incited by avarice to labour that they might transmute less precious metals into gold. Had they attained success, it was urged, they would still not be philosophers, but only artisans, gold-makers ; as it was, while they did not succeed, they were mere ghosts—mechanics in a trade which had not an existence—men from whom nothing solid was received, and nothing spiritual learnt.

The reply of the alchemists may be thus gathered from their writings, that when you see a chemist you should spit upon him. He does not know what he desires ; he bakes and boils at random, hoping to alight on something, and he knows not what. We know the divine object that we have in view. Never believe that alchemy has no success to boast. Our science has been studied, not for seven hundred years, but from the beginning ; Adam studied it. Moses and Queen Cleopatra were the authors of two books on alchemy. Moses was not an adept ; Cleopatra was. Caligula studied alchemy, and so did the Apostle John. The Egyptians discovered its most secret

mysteries, and wrote them on their walls. The wealth and glory of Egypt were caused by its wisdom, and its wisdom had acquired the art of transmuting baser metals into gold. How else could they have acquired the vast masses of gold, the statues and platings of which ancient writers speak? we never see gold in such masses now. When the armies of Sesostris, the great King of Egypt, spread over Asia, some remained in Colchis; and among these were priests, adepts in alchemy, who taught the Colchians how to make gold. You may have heard the story of the Golden Fleece which Jason fetched from Colchis. It is easily explained. The secret of transmutation was unwisely written by the Colchians on the skin of a beast, skins being used for writing upon in those days; and from the nature of the secret it was able to reveal, that skin was called the "Golden Fleece." All these ideas are taken from the works of alchemists who could find faith among the learned in the days of Palissy.

CHAPTER V.

THE GREAT WORKSHOP: OCCUPIED BY THE ORTHODOX.

THE great German Reformers of the Church were in the heat of their zealous labour, far away, when Palissy came out into the world. Luther, Melancthon, Zuinglius, and hundreds more, were active workers on the European mind. Their labour had, however, little influence in France; the struggle for spiritual emancipation in that country was a struggle by itself. To the religious strife in Germany we need scarcely do more than allude. We assumed 1528 to be the year in which Palissy quitted his native roof. It was in the next year, 1529, that in another part of Europe, the protest of fourteen imperial cities against the intolerant decisions of the second diet of Spires, first gave to the reformed section of the Church abroad the name of Protestant. These familiar facts we recal with a word or two to memory. It may help us, also, to connect more easily together, in their due proportions, all the parts of the rough picture which the world must have presented to the mind of Palissy, if we do not omit to note how the mists of astrology, in which we have seen even Paracelsus wandering, could penetrate also into the discussions of the Church.

The number of the beast in Revelations was a stone which disputants on either side endeavoured to claim as their own missile. Johann Rasch, an orthodox scholiast, on three sermons of St. Vincent, with another sermon of St. Hippolytus, informs us "that the learned Staphilus calls the beast—

A	o	v	θ	ε	ρ	α	ν	α
30	70	400	9	5	100	1	50	1

666

not a bad invention. To me," he says, "it is more frightful to consider, that the whole name of Martin

Luther fulfils the exact number. For if any one knows the alphabet according to Pythagoras, as it is commonly employed in the calculation of nativities, let him apportion to each letter its number, and then add them up, he will find the sum to be exactly 666, thus :—

M	a	r	t	i	n	L	a	u	t	e	r
30	1	80	100	9	43	20	1	200	100	5	80

666"

The good scholiast must have troubled himself much in the manufacture of this frightful coincidence, before he found that he could make the sum correct by writing "Luther" down as "Lauter." He goes on to say that many heretics have tried to fit the number to a Pope, but they have always failed ; now, here they have it fitted to a nicety on their own apostate leader !

In Germany the Reformation prospered because princes saw no risk to their possessions when they followed their own choice in countenancing or discountenancing the movement. England had so far advanced in constitutional government that the mind of the country could not be restrained. France stood entirely in a different position. The tendency of events during its early history had been to throw great wealth and power among ecclesiastics. The checks opposed to this had been comparatively slight ; so that the Pope had grown to be a stronger man in France than even in his own dominions. In 1469, Louis XI. had been the first who received from the Pope the hereditary title of "Most Christian King ;" the great power of the Church had been of value to the throne of France, and the French throne had been, in turn, a valuable buttress of the Church. In the meantime the French people had found themselves, for many years past, ground among the millstones of Church property, which played into each other over the whole land. Tithes and fines, and Church dues, for which but little spiritual value was given, made, especially the peasants in rural districts, on the provocation of their emptied pockets, very much disposed to doubt the goodness of their spiritual guides. Where the population was high-spirited the disaffection had been marked. The longing for a Reformation in France had preceded the Waldensian and Albigensian crusades.

Up to the time of Palissy this feeling had been growing, and in his time it existed throughout France in many bosoms, as the harvest naturally sprung of manifest oppression. In the year 1515, Leo X. and Francis I. had met at Bologna, where they had drawn up an agreement between themselves called the Concordat. By this the king conceded to the Pope what he desired in France—an absolute supremacy, and independence of all councils of the Church. Leo paid the king for his complaisance by despoiling the ecclesiastical corporations of the power of nomination to bishoprics and abbeys, transferring that power to the king. Against this concordat, the clergy, the university, the parliament, in vain protested. "There is a king in France," said Francis, and he had his way. The result may be told in the words of a Venetian ambassador to Paris at the time:—"The king gave away bishoprics at the solicitation of the ladies of his court, and employed his patronage of abbey-lands to reward his soldiers; so that the bishoprics and abbeys of France were reckoned as much merchandise by the court as the trade in pepper and cinnamon is among the Venetians."

Church appointments were thus distinctly perverted into money speculations, and the money was that of the working men spread over the fields of France. Restlessness under a Church that cost them much, and gave them little—often absolutely nothing—in the way of spiritual equivalent, taught parishioners to grumble and inquire. They began to question doctrines that had too often a suspicious bearing on the increase of a church revenue; and they began to inquire into prayers, of which the Amen was always Pay Us. They felt disposed to ask that those whom they paid for teaching them should come and teach. That would not seldom have imposed pastoral duty in French provinces upon little children who were eating their spoon-meat in Paris, or upon grisly men-at-arms fighting in the wars of Italy. It was, unhappily, the fate of the French people, that they could not claim religious liberty without claiming the overthrow of so large a part of an unjust political system as would affect deeply the incomes of ecclesiastics, peers, and nobles, and cut off a large slice of the powers of the king. Self-interest banded all the rank and riches of the

country into a strong party, against which the struggle for reform was vain.

The struggle was made, however, and had already begun. Images of saints, almost the first error against which reason openly rebelled, prompted to vengeance by the recollection that these images had been sharp instruments of church extortion ; they were destroyed in many towns by a tumultuous rising of the people, and the severest punishments had followed to avenge each outbreak. Meanwhile the spirit grew that was to struggle for the right.

The temper of the king towards Reformers, during the time when Palissy was travelling through France, cannot, however, be correctly understood without attention to some other points. We must call to mind the title of King Francis as "Father of Letters." He was, in fact, clever for a king—that is to say, he had wit enough to desire the company of clever people. Some of their opponents tell us that the heretics, being commonly deficient in rank and wealth, were driven to depend upon their talents, and became, therefore, exceedingly accomplished. They hoped thus to win converts to their cause. This is not false ; but it is also true that men of sound judgment and quick fancy, men with the largest minds, would be the men most likely to climb boldly up above the prejudices of their day. Such men carry the stamp of high ability about with them, and in his kingly-clever way Francis enjoyed their company—liked them to think that he was able to appreciate their talent. For their opinions he did not care a sol. When not under the influence of policy, he laughed at doctrinal complaints against his courtiers.

Then there was the king's mother, Louisa of Savoy, and there was his clever sister Margaret, Duchess of Alençon—Margaret of Navarre. They were both clever people. The somewhat recent practice of admitting ladies to the court had introduced much light frolicking. Boccaccio was a darling author, and to imitate him had become a fashion. Before the reign of Francis, royal brains had been beaten for the production of novelettes. Royalty sets a fashion well afloat. In the time of Francis, therefore, it was an established custom at court, in Paris, and in the chief towns of France, for people to give

story-parties, as we now give parties for quadrilles, at which they met to sup and tell each other stories, after the manner of the gentlemen and ladies in the pages of Boccaccio. In this game mother and daughter—Louisa and Margaret—had tried their skill. Louisa owned that Margaret had beaten her. The novelettes of Margaret of Navarre live in print; and though she may have been one of the most cultivated women of that time and country, women of this time and country could not read her compositions except at the cost of a whole rose-garden of blushes.

Louisa of Savoy was a rigid Catholic; Margaret favoured and protected the Reformers. Louisa was not an ascetic; but she persecuted upon policy, for she was shrewd. Margaret was not a religious woman; but she did not care for policy, and she did care to be surrounded by people of good sense and taste. Persecuted heretics, if they were clever men, had a sure refuge in her circle; and they might preach, if they pleased, as they travelled with her. Louisa was shrewd. When Francis was carried prisoner to Madrid, having sent his mother the bombastic message that he had lost all save honour, Louisa became regent, and displayed her tact for statecraft in sundry ways. One of these ways was the institution of severe measures against the dissentient members of the Church. When Francis was released by his rival on parole, and broke his parole to recover his kingdom, he did not send word to Charles that all was gained by loss of honour. Francis then, resuming the reins of his government, found that the reform horse had been severely punished by the temporary driver. Should he relax in that severity? Policy hinted that he should not; so thought also the Pope, to whose power he now had a new cause of attachment—the Pope had absolved him from all consequences that might follow after death upon the perjury committed at Madrid.

Francis had more to prompt him than his mother. The Pope was already powerfully represented at Paris by the astute and unflinching doctors of the Sorbonne.

In the mind of Francis it is not possible to detect the influence of any fixed religious principle. He was essentially a selfish man, and, as selfish men go, not of the best. I may have given some confusion to the idea of court

feelings and court motives as they affected the interests of a Reformed Church in France, and I have left it complicated with a mention of extraneous frivolity. This confusion certainly existed in the king's mind, and prompted many inconsistencies ; once, for example, he supported Church reform in Switzerland at the same time that he was overthrowing it in France. Let us turn now from kingdom to manhood, and quit Francis I. for Bernard Palissy.

Picture-making, glass-painting, and occasional employment of his skill with rule and compass as a land-surveyor, sustained Palissy upon his travels well enough. Closely observing nature, carefully inquiring into all he saw, acquiring yearly new stores of experience, Palissy ripened, as the years went by, into a practical and earnest man. The outward covering of Frenchmen whom he met in those days was to him, and is to us, a matter of no great concern. They were the days of knights who rode in armour, and swept down upon the enemy in battle, or on a rival at a tournament, with lance in rest. Such men, riding along the road in their own portable fortresses, must have been to Bernard every-day sights. If we look at those pictures, on tombs and elsewhere, in which the occurrences thought most worthy of illustration were reproduced by contemporary fingers, we find in the years corresponding to this period of the life of Palissy, mailed knights, and cross-bowmen in closely-fitting dresses ; men on foot commonly in dresses fitting closely to the limbs, suggestive of a period of war, and the necessity of putting no encumbrance upon bodies made for animal contention. Even the hair seems to have been rather closely cropped, except upon the heads of men pursuing peaceful occupations. Horsemen, when not in armour, wore a short tunic ; and the same garment over the closely-fitting dress was worn by countrymen and townsmen, who worked on their farms or in their shops. High state had, of course, some robes ; and the long robes of scholars and ecclesiastics indicated, by enveloping the body and serving as impediments to action, that they were men of peace as to the flesh, whose business it was to wrestle with the spirit only.

The dwellings of the poor and of the middle class were wretched or uncomfortable, the palaces and mansions of the

rich were fortresses. We see them in pictures as dull masses of rock, with windows bored irregularly here and there upon the surface, most of them miserably small, as if too large an opening would be too great a breach by which an enemy might enter.

But we may remark here, to forestal the necessity of again reverting to the subject, that the period occupied by Palissy in travel was the period in which these grim old homes died out. Francis, with his patronage of talent, brought into France new tastes ; and it was at the time in which we are just now concerned, that Italian models were about to influence the architects of France. The palace of Chambord had been begun by Francis I. in 1523, and he had then no better idea than to build it in the rude and sombre fortress style. The palace of the Louvre itself was a building of the same description. The rebuilding of the Louvre, under the eye of Francis I., by Serlio, who was protected at his court, and the erection of the present structure from the plans (which Serlio candidly preferred to his own) of Pierre Lescot, indicate how great a change had in a few years come over the architecture of the country since King Francis built the palace of Chambord.

Examples of religious persecution, cruel punishments of heretics in market-places, and expressions of much discontent on matters of religious doctrine, must have formed no inconsiderable portion of the experience upon which Bernard Palissy looked back at the conclusion of his years of travel. The kind of information obtained by him concerning matters of this kind, may be illustrated by a short account of the punishment of certain Sacramentaires in Paris, on the 12th of February, 1535, while Bernard was travelling, and when he was about twenty-five years old. To this I prefix one or two illustrations of the way of arguing then common among heretics in France. They consist of fragments from a temperate little book, published during the lifetime of Palissy, for the purpose of stating to the French briefly the reasonableness of the Reformed doctrine.

“The real presence in the Sacrament we refuse to believe. They say that all sacrament receives the name of sacrament because it is the symbol of a sacred thing ; so that it is necessary to comprehend the outward sign by

the eye, and by the spirit the thing signified, which is inward and spiritual. When we divide these parts in the Holy Supper, the bread and wine are the sign which we see with our eyes, and receive by the mouth ; but the body and blood of our Lord Jesus Christ, they are the thing signified, which we comprehend and receive by the spirit, as a true spiritual viand, destined to nourish spirit and not flesh. Now, to receive and eat this spiritual viand, and to cause it to digest in our souls (which are spirits), to nourish them and make them live eternally, it is necessary that there be a spiritual manducation, since both food and soul are spiritual. We, however, *Sacramentaires* as we are called, denounce the notion that the real body of our Lord comes down from heaven daily, in countless morsels, to be chewed between the foul teeth of priests, and digested with the garlic in their belly. For this heresy the Pope has moved King Francis to destroy us.

“The Pope has no just right to interfere against us. He is a Prince in defiance of the canons of the Church. St. Gregory, Bishop of Rome, whom they all call the greatest of the Popes, wrote thus : ‘ If any one attributes to himself the name of Universal Bishop in the Church, what will be the judgment of all good people. The universal Church would fall from its estate when he who was the universal bishop fell. Far be then from the heart of Christians,’ says St. Gregory, ‘ this blasphemous name, by which the honour of all priests is taken, being unjustly usurped by one.’

“Other differences also separate us from the congregations of the orthodox.

“The difference between us touching the commandments of God is not small. For we accuse the Church, or rather the Pope, of having effaced from the Decalogue the second commandment, which forbids images, and of having split the last one into two, in order to maintain the number ten. Truly it is a great sacrilege, and a temerity quite insupportable, to have dared to erase a whole commandment of the law of the living God. For if you observe the commandments which the curates are accustomed to pronounce at the parochial mass, you will find, that immediately after the first commandment, ‘ Thou shalt have none other Gods but me,’ they have put the third, ‘ Thou shalt not take the name of the Lord thy God

in vain,' and have effaced the second, which forbids the bowing before graven images, or the likeness of anything that is in heaven and earth. This has been done by the Pope and his supporters, that they might be more easily able, without attracting notice, to fill the temples of Christ with idols, and male saints and female saints, and then draw to them all offerings, obventions, and other profits, as has indeed been the result.

"We deny also the efficacy of masses, except as aids to the coffers of the priests. If by means of them and of other pretended good works, one can gain paradise, it will follow that paradise must be without comparison more easy to gain by the rich than by the poor. For the rich have much better means than the poor of causing masses to be said, of making gifts to priests, of going on long pilgrimages, of buying good fish that they may abstain on a fast day from eating meat—they have better means of doing these, and other like things. So for the rich the gate of paradise would have its hinges greased, while for the poor it would be difficult to open; those who have the wherewithal to be happy in this world would be happy in the next, while to the poor both worlds would be miserable. This would be an unseemly thing. But, on the contrary, it is certain that paradise opens its gates more readily to the poor than to the rich, and that it is hard for the rich to enter.

"For truly the poor receive but little in this world—less than their dues. By the ancient canons of the Church, the tithes are called the tributes of the poor: and for this reason they who do not duly pay the tithes are reputed guilty of the death of men who perish in their district through necessity and indigence. Yet it is a common thing to see men lying dead of want by the roadside. And who will estimate the guilt of those who well know how to exact these tithes, and who keep them for themselves, and who retain the portion of the poor! What do the canons say of those who retain the portion of the poor? 'The tithes,' says one, 'are the tributes of the indigent souls, so that if you pay well the tithe, not only will you receive abundance of fruits, but also health of soul and body. He who does not pay is an usurper of the goods of others; and as many poor as die of hunger in the place where he dwells so many will be the homicides of which

he will be held guilty before the seat of the Eternal Judge, because he has converted to his own use that which was destined for the poor.' It is said in a canon taken from St. Ambrose, that, 'the Church has gold, not to keep it, but to distribute it to the necessitous.' The canon taken from St. Jerome, says, that, 'to appropriate goods of the poor, is a crime which surpasses the cruelty of the greatest brigands in the world.' There you have a definitive sentence which the good doctor, St. Jerome, has pronounced against those who retain the goods of the poor, and apply them to their own use. O Eternal God ! how many brigands have we at this day in the world who are condemned by the sentence of St. Jerome ! Then, again, they who clothe themselves with the wool of the flocks ought also to provide them pasturage. By a canon of the Tolitan Council, 'Ignorance, mother of all errors, should be greatly avoided by the priests, whose charge it is to preach God's word to the people.' The priests are admonished to read the sacred Scripture by St. Paul to Timothy : 'Preach the word ; be instant in season, out of season ; reprove, rebuke, exhort with all long-suffering and doctrine. Let the priests know the Holy Scriptures and the canons, and all their work be preaching and doctrine ; and let them edify each other as well by knowledge of faith as by works of discipline.' But where are now the pastors who undertake to preach ? Will you find one in a hundred ? There are none but some monks who undertake the task, and by them it is done against the professions of monasticism. For by the canons it is not allowed that monks should preach."

It is to be owned that a good Catholic cared in those days little enough for monkish preaching. He went to mass, and, if a Parisian, attended faithfully the ministries of Jean du Pontalais. Jean was a preacher of undoubted popularity. The monk came badly off who undertook to preach against him, for when Jean du Pontalais had fixed his pulpit in the market-place, the church was emptied, and men, women, and children flocked about him, eager to hear how he thundered with a great sword in his hand. It was not the sword of the Church ; no, he had no more ill-will to heretics than to the orthodox, if only they paid their pence ; and, wonderful to tell, he was paid always without grumbling. He was a mummer, in fact

the Thespis of the nation. Aftertime has heard of Jean du Pontalais. See him at the head of his troop, gay with spangles, marching to the sound of music through the street, mounting his platform, speaking his prologue, marshalling his heroes up the steps which they are to descend each as his turn comes to strut upon the stage. They are about to present the Comedy of the Acts of the Apostles, and that surely is good preachment. There was not so much pleasure in the world that men could spare one harmless source of laughter. If the preacher made the church too dark the people might prefer to stay out in the sunshine.

In those days there was a preacher who believed himself a fountain of enlightenment. "Others," said he to himself, "may have the doctrine, but I have the manner. I have the real turn of the wrist—the exact modulation which insinuates all that I teach infallibly into the hearer's mind." He was a man who seldom looked at his own feet, or saw more of the houses than their tops. Now Master Jean, having to play one Sunday afternoon, marched his procession straight towards the church in which the preacher was at work, drew up his troop in a cross-way under the church windows, and ordered his tambourine to be sounded upon strongly, for the express purpose of stopping the preacher, whose congregation he designed to bear off to the market-place. But it was not likely to obtain release; for the more noise the tambourine made the more the preacher shouted to be heard in spite of it. So Pontalais and he contested who should leave off last. Presently the preacher got into a rage, and said quite loudly, and full of clerical authority, "Let somebody go out and stop that tambourine." But for all that nobody went, except that if anybody went out, it was to go and see Master Jean du Pontalais, who caused the beating to proceed louder and louder on his tambourine. When the preacher saw that since he was resolved not to be silenced, "Truly," said he, "I will go myself; let nobody stir; I shall be back immediately." So when he came into the cross-way, furious with rage, he said to Pontalais, "Heigh! what has made you so bold as to play your tambourine while I am preaching?" Pontalais looked at him and said, "Heigh! what has made you so bold as to preach while I am playing on my tambourine?" Then the preacher, more

vexed than he was before, took the knife of his *famulus*, and made a great gash in the tambourine with this knife, and returned to the church to end his sermon. Pontalais took his tambourine and ran after the preacher, and dressed his head with it, fitting it to him slyly by the hole like an Albanian hat; and then the preacher, ignorant of his condition, remounted his chair, to urge the wrong that had been done to him, and how the word of God had been vilipended. But everybody laughed so much to see the tambourine upon his head.

And this story was accounted by the orthodox a merry jest.

Surely, when worldly dealings had abased the Church till it was matter for such tales as this among the people, it was fully time for men to betake themselves to earnest thinking, and to oppose abuses even at the risk of martyr-fires like those prepared in Paris for the before-mentioned ceremony of the 12th of February, 1535, of which fires this is in brief the history.

One morning in October, 1534, when the king was at his castle of Blois, a placard was shown to him which had been affixed to the castle gates by certain rash Sacramentaires, insulting the thrice holy and blessed sacrament. King Francis, in a fury, quitted Blois for Paris. The next morning there was a similar placard affixed to one of the pillars of the Louvre. King Francis breathed vengeance against the blasphemers of the real presence in the sacrament; the vengeance he desired, however, was against the insulters of the royal presence in the castle and the palace. To his worldly, knightly pride, the placard was as a glove of defiance. He therefore took counsel with the Pope and the Sorbonne; and the result was a determination to affright the heretics, and to support the cause of order with a ceremony. For the 12th of February, 1535, a solemn day of humiliation was appointed; the king, and all the high and mighty of the kingdom, were to implore pardon from Heaven, and avert from France the evils that might follow from the impiety of the Sacramentaires. At the same time an example of severe punishment was to be set for the edification of the country. We must relate it, because it occupies a determined place in the history of opinion at that time; and for a comprehension of the events and opinions which will belong to the mature

life of Bernard Palissy, it is absolutely necessary to have a fair idea of the position of the French Reformers.

The spirit of the day—this 12th of February, 1535—will be most properly conveyed by telling its tale in the language of an ecclesiastical annalist, Rinaldi, who was born at the close of the same century, and wrote as a faithful disciple of the Roman Church. To begin with the procession :—“Jean Bellay, Bishop of Paris, walked with the most sacred eucharist under a canopy, which was uplifted by the Dauphin, the Dukes of Orleans and Angoulême, sons of the king, and the Duke de Vendôme, first prince of the royal blood ; there were also carried through the town, by robed priests, many relics of the saints. But the king himself, bearing a lighted torch, his head bare, his eyes downcast, followed with the queen ; and with great pomp of people of all ranks the sacred eucharist was carried from the church of St. Germain to the temple of the most Happy Virgin. Then the king, in a most grave and holy speech which he made, bore witness that he would oppose himself against all guilty heretics, and that he would punish with severity even his children, if they should ever take the pox of heresy, and that he would strike off his own arm, if it ever could commit so great a crime.

“On the same day a most caustic punishment was endured by six offenders who had published blasphemies against the adorable eucharist, in pamphlets which they had distributed ; for they were bound to a huge wheel, which, being made to revolve, dipped them into the fire placed at its foot, and again carried them into the air, and afterwards, as they descended, they were again scorched, until at last, the links being divided, they tumbled headlong into the burning torture, and were consumed by the flames. Other men, guilty of the same impiety, were afterwards arrested in a body, from whom there were exacted cruel penalties.”

CHAPTER VI.

THE GREAT WORKSHOP; ENTERED BY THE HERETIC.

PERSECUTION of the Sacramentaires commenced with so much violence alarmed not only as many French as were infected by the heresy, but also the heretical princes of Germany, who gravely inquired concerning it in letters to King Francis. They were answered that he had lawfully put in force against them a severity of judgment, because, by the study of new-fangled ideas, they were exciting seditions in the kingdom.

So the tale is told. The grave inquiries of the German princes were not, of course, dictated by terror. Francis, in the network of his policy, had as allies against the power of the emperor princes of Germany who had adopted the reform which Luther preached. The violence of the French king against the heretics, and more especially this public declaration of the 12th of February, suggested to Charles a means of interrupting the political friendship of his allied adversaries. He caused the German princes to be well informed of the events in France, and warned of the probable spirit of a friend who acted thus towards those of his subjects whose crime was only the being what his allies, the princes, were—Reformers in the Church. Upon this hint, the allies appealed to Francis. Francis did not choose to lose a good political position, and reassured the princes by informing them that the French heretics against whom the sentence of his wrath was issued, had no resemblance whatever to the Lutherans; that they were not mere seekers of reformed religion, but men disaffected to the state, enemies to law and property, firebrands and Anabaptists. The answer to this slander came from Calvin, when he dedicated to King Francis his exposition of Reformed opinions, in a preface dated from Basle, August the 1st, 1536. His work, translated out of

Latin into French, became at once the text-book of the French Reformers.

Jean Cauvin (Calvin), aged twenty-five, had quitted Paris and France not many months before that day in February of which we have just been speaking. Calvin and Palissy were born in the same year, if I have assigned the right date to the birth of Palissy. The little sketch of the career of Calvin, which is necessary for the illustration of those troubles in which Palissy lived to be most closely interested, we shall chiefly take from the lips of his disciple and successor in apostleship, Theodore Beza. The birth of Calvin, when told in the words of Beza, will recal to our minds what has been said of the world at that time, viewed under another aspect.

"I will begin," says his friend, "with speaking of his nativity, which was the 10th day of July, in the year 1509; and this I note, not that we may seek in his horoscope the cause of the events of his life, much less of the excellent virtues that were in him, but simply with regard to history. And, in fact, he himself had in such horror the deceits which are in astrology, which is called 'judicial,' that he has made a book purposely, in which he has shown in a lively manner, by good reasons, but principally by the word of God, that it is not a thing to be supported in a Christian Church, or republic wisely ordered, inasmuch as it is only vanity and lies—it would be doing wrong to give rein to such speculations touching his own person. Only let us content ourselves to know, that God, purposing to employ him at the fitting time, placed him in the world on the above-named day. This was at Noyon, an ancient and celebrated town of Picardy."

Cauvin's father, Girard, being known for a shrewd man, of business habits, was much sought in his own neighbourhood, and became a familiar guest at the houses of the surrounding gentry. So it happened that the children of Girard had many well-born children for their playfellows, and Jean was sent to college in company with the sons of a high-born neighbour, though, of course, at his father's cost—or rather, perhaps, at his own cost; for, by the help of his highly-respectable friends, he was endowed with a benefice at the age of twelve. That was an everyday occurrence. Jean Cauvin, while a boy, had pocket-money from his benefice at the cathedral of Noyon, his

native town, and he had also a curacy at Pont l'Evêque, his father's birthplace.

At the College de la Marche, which he first entered, Cauvin had for one teacher M. Maturin Cordier, an earnest, simple-hearted man, who spent the whole of a long life in many places, but always in one work, instructing children ; and at last died at Geneva, aged eighty-five, teaching still to within a few days of his death. Then Cauvin entered the College of Montaigu, where a Spaniard was class-teacher ; and the youth's private tutor was a Spaniard, who afterwards graduated in medicine. Under these influences, Cauvin advanced much in the study of philosophy.

Now there was at that time studying in Paris a fellow-townsmen, an old companion of Cauvin's, and some years his senior. With this old friend, named Pierre Robert, it was natural for Cauvin to associate. Pierre Robert—known afterwards as Olivetan—had thought himself into Reformed opinions on the subject of religion ; and the opinions of Pierre Robert exercised great influence upon the mind of Jean Cauvin.

At the same time that the youth's mind was swerving from the Church, his father came to the opinion that the law would be a more profitable profession for him than divinity. Jean was well pleased with his father's notion, and went to study law at Orleans. There he was a disciple under Pierre l'Etoile, afterwards president in the Court of Parliament of Paris ; and he himself profited so well, that he began in a short time to play the tutor, and was employed more frequently to teach than to learn. He was offered a gratuitous degree, but he declined it. Then, because the University of Bourges was in much repute, on account of the famous jurisconsult Alciat, who was lecturing there, Cauvin went to Bourges. But everywhere, whatever else he studied, he persevered closely in the pursuit of sacred letters.

These wanderings of Cauvin in the search of education illustrate very well the way in which knowledge was literally pursued by young men who desired more than a common-place amount of information. The passage which I now quote verbally from Beza, pleasantly reminds us of a time when men and women went to bed at hours appropriated now to children. "As to (Cauvin's) appor-

tionment of time to his studies, there still live persons worthy of faith"—(mark the asseveration needful as a preface to so wonderful a fact)—"there still live persons worthy of faith, who knew him familiarly at Orleans, who say that at that time he very often studied until midnight; and that he might do this, he ate little at his supper. Then, when awake in the morning, he remained some time in bed, remembering and ruminating all that he had studied overnight." (So, no doubt, he told his landlady; but I suspect that he was, in fact, not fond of getting up.) "There can be no doubt," continues Beza, "that such watches were very hurtful to his health. But he took those hours for his chief studies, in order to be able to continue more freely, and without being interrupted."

Among others to whom Cauvin was indebted at Bourges for intellectual assistance was a German friend, Melchior Wolmar, who, perceiving him to be deficient in a knowledge of Greek, gave him instruction in that language. At this time Cauvin preached occasionally in a little town of Berry, named Lignières, and also visited the seigneur of that place. This gentleman afterwards, "having no other apprehension of things, only said in a general way, that it seemed to him that M. Jean Cauvin preached better than the monks, and that he went bluntly to his business."

While Cauvin was at Bourges his father died. Upon this event there of course followed family arrangements which recalled him to Noyon; and from Noyon, abandoning his law-studies, he went again to Paris, then first abandoning his benefices also. In Paris, it was not long before he published, in Latin, his Commentary upon Seneca on "Clemency;" they were "*Johannis Calvini . . . Commentaria*;" and Cauvin the student then first came out into the world as Calvin the scholar. From that time the Latinised edition of his name began to grow into familiar use.

Among the friends of young Calvin, during this second period of residence in Paris, was Etienne de la Forge, a merchant, diligent and prudent in his business, but a simple-minded man and a good Christian. Calvin retained much love for M. de la Forge, who was eventually burnt for his adherence to the gospel.

Now, Calvin had resolved to dedicate his life to the

Reformed religion, and became intimate with learned men in Paris who were discontented with the existing character of the Church. One of these was Nicolas Cop, rector of the university. Nicolas Cop, in the year 1533, made an oration at the feast of All Saints, more advanced in the religious tenets it professed than suited to the views of the Sorbonne and the parliament. It was determined to arrest him, and he retired to Basle, of which town his father, Guillaume Cop, physician to the king, was native. The known associates of the heretical rector fell, of course, under suspicion; and among them Calvin, whose chambers at the College Fortret were entered, a little too late, for the purpose of making him a prisoner. Calvin, assuming for disguise the name of d'Happeville, fled to Saintonge.

Saintonge is the district in which the home of Palissy was afterwards established, and the little church of the Reformers in that part of France, of which church we shall hereafter find Bernard Palissy so prominent a member, claims to have had Calvin himself for its founder. He went first to Angoulême, where he dwelt in the house of a young man whose friends were wealthy, and who had a benefice to live upon (Louis du Tillet, curate of Claix and canon of Angoulême cathedral; his brother, chief notary to the parliament of Paris, was celebrated for his love of letters). This young man persuaded Calvin, while in his house, to write Christian sermons and remonstrances, which he then caused to be preached by certain curates in the neighbourhood. Calvin repaid the kindness of his host by teaching him Greek, then a language understood only by the very learned; and was himself so remarkable for his studious habits, that the present dwellers in those parts retain legends of his having passed days and nights without food or sleep while working at his "Institutes," in a vast library that is said to have been possessed by young Du Tillet. They say also that Calvin was at that time called among the country folks the "Little Grecian." The legends of the Reformed churches in Saintonge go on to relate how their great founder used to meet friends at Girac, a house near the gates of Angoulême, for the purpose of studying the Scriptures; that he communicated to such friends many pages of his "Institutes," reading them as they were written; and that before opening his manuscript he used to pronounce these words:

"Let us find the truth." Still he remained nominally in the ancient fold, and even was called to deliver Latin orations in the Church of St. Peter ; but already he lost no opportunity of disseminating a full knowledge of the gospel. Of Calvin it is said that he remained three years at Angoulême, a fact as impossible as some other of these traditions are unlikely, and that he settled then at Poitiers, which is another circumstance not likely to be true. He can have paid no more than a visit of a few weeks to the town. While there he is said to have lodged with François Fouquet, prior of the Three Monasteries, and also with Renier, a lieutenant-general. Near Poitiers there are some excavations, called the Grottoes of St. Benedict and of Crotelles ; one of these is to this hour called the Grotto of Calvin. He is said to have retired into it for the sake of privacy in study, and there to have secretly met and prayed with friends inclined towards Reform. In this grotto it is said that he first detached himself absolutely from the Church of Rome. One day, when he was preaching to his friends in the caves of Crotelles against the doctrine of transubstantiation, one of his hearers, Charles le Sage, a doctor of Poitiers, said that there must be truth in the sacrifice of the mass, since it was celebrated in all places where men worshipped Jesus. "There is my mass," said Calvin, pointing to the open Bible ; and then laying his cap and cloak upon the table, he looked up to heaven and cried, with the accent of conviction. "Lord, if in the day of judgment Thou reprovest me for not having attended at the mass, and for having abandoned it, I shall say with good reason, 'Lord, Thou didst not command it of me. Behold Thy law, behold the Scripture, which is the rule that Thou hast given me, in which I have been able to find no other sacrifice than that which was immolated on the altar of the cross.'" By such preaching Calvin is said to have formed at Poitiers the germ of the Reformed Church in Saintonge. Charles le Sage joined it ; also another doctor of the University, Antoine de la Duguie, and Renier, the seneschal's lieutenant-general. The Lord's Supper was celebrated by these men for the first time in the Grotto of Crotelles, and it was agreed that three gentlemen who had joined the small society, namely, Albert Babinot, a doctor of laws, Phillipe Véron, an attorney, and Jean Vernou should exercise the functions

of evangelists, and preach the Reformed doctrine—Vernou at Poitiers, Babinot at Toulouse, and Véron, who took the name of le Ramasseur, in Saintonge, Aunis, and Angoumois. When Calvin had departed, and was settled at Geneva, these three of his friends used to report to him their progress and repair to him for counsel. Babinot, failing in Toulouse, joined le Ramasseur, who was zealously scattering instruction throughout every town and village of his district. The labour of these ministers was not in vain. Several gentlemen quickly assented to their doctrines. Among the first of these were the Seigneurs du Fa, in Angoumois, and de Mirambeau, in Saintonge. It was while Babinot and le Ramasseur were in the first year of their teaching that Bernard Palissy settled at Saintes.

While in Saintonge, Calvin on one occasion made a voyage to Nérac, to see the good man Jacques Faber d'Etaples, who was very aged. He had been teacher to the children of the King of France, but being persecuted by the Sorbonne, had retired into those regions. The good old man was much pleased to see Calvin, and to talk to him. After some little time—when the Cop scandal was probably forgotten—Calvin emerged from his refuge in Saintonge, and returned to Paris. But very quickly he found it advisable to avoid the spirit of persecution, and quit not Paris only but also France. He did this in the year 1534, accompanied by one of his brothers, and by the young man who had sheltered him in Angoumois. Calvin himself was, of course, then also a young man, being twenty-five years old, but full of energy, and talent, and ambition. Before quitting France, he published, at Orleans, a little book upon the sleep of the soul after death, called "*Plychopanychia*." Calvin retired to Basle, and was at Basle during that month of February, 1535, concerning which I have already spoken, busily at work upon a digest of Reformed opinions, which he proposed to publish under the title of the "*Institutes of Christianity*."

The design of Calvin was not humble ; he desired his book to be received as the declaration of faith and rallying-point of the Reformed Church in France ; but there was need of such a mouthpiece, and to want ambition would be to want manhood, where there exists power to climb

high in any right direction. After the public atrocity of February 12th, 1535—after the appeal of the German princes, and the reply of King Francis, stigmatising the Reformers as political firebrands and revolutionists—Calvin perceived that a good hint was given to him for the framing of his preface. The preface to his book, in which it was dedicated to the most Christian king as a confession of faith, dwelt upon the royal misconception on which persecutions had been founded, and affected to believe that when he had read that confession of the Reformed faith he would be glad to alter his opinions. The Sorbonne called this rank impertinence ; so, doubtless, thought the king, since it at least implied that he had made a blunder, though it gave him credit for the candour necessary to a fit acknowledgment thereof. This preface or dedication (which is dated from Basle on the 1st of August, 1536) Calvin tells the king is intended “to mollify your mind aforehand to give audience to the disclosing of our cause ; which your mind, though it be now turned away and estranged from us, yea, and enflamed against us, yet we trust that we shall be able to recover the favour thereof, if you shall once have, without displeasure and troublous affection, read over this our confession, which we will to be instead of a defence for us to your majesty.” (Here we should pause to remark the decided ambition which prompted Calvin, then but twenty-seven years old, to speak—undeputed—in the name of the French Reformers, and call his “Institutes” a book “which we will to be instead of a defence for us to your majesty.”) “But if the whisperings of the malicious do so possess your ears, that there is no place for accused men to speak for themselves ; and if those outrageous furies do still, with your winking at them, exercise cruelty in prisoning, tormenting, cutting, and burning—we shall, indeed, as sheep appointed to the slaughter, be brought to all extremities, yet so that in our patience we shall possess our souls, and wait for the strong hand of the Lord—which shall, without doubt, be present in time, and stretch forth itself armed both to deliver the poor out of affliction, and to take vengeance on the despisers, which now triumph with so great assuredness. The Lord, the King of kings, stablish your throne with righteousness, and your seat with equity, most noble king.” So the dedication closes ; and if Calvin meant it

to be really mollifying, it is very evident that he was no great master in the art of speaking softly. We are reminded rather of the opinion of the gentleman at Lignières, that "he went bluntly to his business."

Of the accusations made against the Reformers, and which were, in truth, the accusations pleaded by Francis to the German princes, Calvin tells the king elsewhere in his dedication: "Herein is violence showed, that without hearing the cause, bloody sentences are pronounced against it: herein is fraud, that it is, without deserving, accused of sedition and cruel doing. And that none may think that we wrongfully complain of these things, you yourself can bear us witness, most noble king, with how lying slanders it is daily accused unto you; as, that it tendeth to no other end but to writhe from kings their sceptres out of their hands, to throw down all judges' seats and judgments, to subvert all orders and civil governments, to trouble the peace and quiet of the people, to abolish all laws, to undo all properties and possessions—finally, to turn all things upside down."

It has already been pointed out that these accusations against the Reformers were not founded upon nothing. The ecclesiastical abuses had become so completely blended with the political system in France, that religious become unavoidably, at the same time, social and political reform. In our own country, at the present day, we have our civil list, our sinecures, and vested interests. We know what jealous eyes watch over them, and what a revolutionary thing it would be to destroy or cut down the incomes of some thousand men—grand falconers, lay impropiators, pluralists, and others, whose only social title to the income they derive from their nation, or their parishes, is that they were born or bred into a habit of regarding it as theirs. The misuse of Church patronage in France in Calvin's time was so extensive, so inveterate, that the most elementary principles of Church reform could not be put into practice, without doing what a warm lover of existing order in those days might easily declare would tend "to undo all properties and possessions—finally, to turn all things upside down."

Of the great mass of rank and wealth, and of the class of men whose entire little income hung upon a Church abuse—the benefice holders, banded by the common tie of

interest against reform—Calvin in this dedication speaks as we find all other Reformers of the time constantly speaking. They were the great bar to moral progress. "For," says Calvin, "their belly is their God, their kitchen is their religion; which being taken away, they think that they shall not only be no Christians, but no men; for though some of them do plenteously glut themselves, and other some live with gnawing of poor crusts, yet they live all of one pot, which, without these warming helps, should not only wax cold, but also thoroughly freeze."

Calvin, having published his "Institutes of Christianity," left Basle for some months. He went to the Court of Queen Renée, a good Reformer; travelled in Italy, visited Paris; and was returning to Basle through Geneva, when, at Geneva, his course was stopped. Geneva had freed itself, and for a year past, in that town, the Reformed religion had been legalised. Farel was its expounder, with whom, at first, Viret was associated. Viret had been absent many weeks, and Farel, needing help, had been wanting him back sorely. That was the state of the Genevese Church when Calvin was passing through Geneva on his way to Basle. Calvin immediately was invited, and some say compelled by forcible entreaty, to take Viret's place. He did not need entreating, we may be quite sure. With respect to his book, his ambition had been fulfilled; it had been gratefully adopted by the French Reformers. Before it was published, they were banded together by a common sense of Church abuse, a common opinion on many leading points of doctrine; but on minor points, for want of any common spokesman, each had formed opinions of his own, and there were many variations in their doctrine. Calvin, having published a detailed confession of faith, gave to all weaker minds a thing to hold by. A pattern was held up, to which the mass conformed; and Calvin knew that he was then in a fair way to become more and more, year by year, what he desired to be—the head to the great body of the French Reformers. This was his certain hope when he was requested to officiate with Farel in Geneva. Geneva was a free town, in which French was spoken, and it was close to the French frontier; he could be safe there, however boldly he might speak; he could feel at home among men speaking his own language, and he could easily and

quickly make, from Geneva, expeditions into France whenever he saw opportunity of doing so with safety and with profit to his cause. Therefore Calvin settled at Geneva, in September, 1536, and there dwelt and laboured at the time when Bernard Palissy settled at Saintes.

It is not necessary to dwell more at length upon the state of society in France during Bernard's years of wandering. It was essential to our proper comprehension of his after life that we should recal to our minds those points, in the world of which he had experience, by which especially his mind was influenced. This has been done ; and now we slip over the period of travel, and find Bernard Palissy settled at Saintes, full of simplicity and full of power. He has the very pattern-mind of a philosopher, but hitherto he has done nothing—painting pictures, staining glass, and drawing plans.

Book the Second.

THE POTTER.

1538—1557.

CHAPTER I.

PALISSY MARRIED AND SETTLED—THE ENAMELLED CUP.

HAVING long hovered over France, Bernard Palissy settled at length in the small but not quite insignificant town of Saintes. He spelt it Xaintes, and so did his contemporaries. There he probably was fixed, because he was not proof, like Paracelsus, against woman's charms. I suppose him to have married at the age of about twenty-nine, in the year 1538. This is the last date which it will be requisite to give upon hypothesis.

Palissy having married, was no longer able to wander as he listed, asking questions, studying the rocks and trees, and living as he could, while he was growing in experience, not very careful for the morrow. He therefore fixed himself in an abode at Saintes, and undertook whatever occupation he could get, as a surveyor, as a painter, or a glass-painter. His engagements as surveyor usually sprang out of disputes concerning land, formerly a constant source of litigation in most countries. In such disputes the quarrel commonly depended on a question about boundaries, and a plan of the contested property became essential. When such disputes occurred in his own district, it was usual to employ Bernard Palissy in a character similar to that of sworn surveyor ; and every little engagement of this nature was a godsend to his household purse. But his supplies came slowly, on the whole ; more than he had been used to earn while roving it was not easy for Palissy to earn when fixed at Saintes ; and he had now a wife depending on his labour ; children, also, were not tardy of appearance.

In a year or two, if my last date was right, Palissy already had begun to feel that he was wasting power. Thirty or thirty-one years old, young, vigorous, and prompted forward by intense activity of mind, Bernard

began to feel that he was capable of better things than a long trudge through life, with no aim higher than to get his bread by meriting the patronage of the nobility, gentry, and the public in general of the small town of Saintes. It abounded in all the jealousies and scandals which are proper, in all nations, to a district capital. Bernard sighed, therefore, for higher occupation, while he earned a slender income for the support of his household, in the first months or years of his establishment at Saintes.

Saintes is the capital of Saintonge, a district which pretty accurately corresponds to the department of Charente-Inférieure. Aunis, Saintonge, and Angoumois, form, at this day, a province. Saintes and Saintonge are connected intimately with our future story ; it is, therefore, necessary to have some conception of their character. Saintonge is a district fertile in corn, wine, and fruit ; and its fertility was recognised by Cæsar, who relates how certain tribes left their more barren soil for that of the Santones. Saintonge is divided, by the river Charente, into two unequal parts. Upper Saintonge, on the south side of the river, is the larger of the two. It is watered by the Soudre and the Sevigne. Through Lower Saintonge flows the Boutonne. The wide embouchure of the Garonne gives a sea-boundary to Saintonge on the south, in addition to its western coast-line. That portion of the district beyond the Soudre, which is hemmed in between the Soudre and the mouth of the Garonne, was called, in the time of Palissy, the island of Allevert—which is now written Arvert. About the mouth of the Soudre, on the side opposite to Allevert, are the salt-marshes of Marenne ; and Marenne also is sometimes called an island. In the sea—a real island—opposite the mouth of the Soudre, is Oléron ; and others are adjacent. These places will hereafter frequently be mentioned. Except that from the famous salt-marshes of Marenne, the salt of Saintonge was produced north of the Charente. Saintonge, in the time of Palissy, was thought to produce the best salt in Europe, and was the chief source of salt in France, until it was obtained more abundantly from Brittany. The vintage of the district was manufactured usually into brandy ; the town of Saintes is not, indeed, many miles below Cognac ; the same river Charente watering the fields of both of these towns.

Several towns of Saintonge contained, in Palissy's time, tanneries. The meadows of Saintonge yielded a valuable pasturage, its horses bore the highest character. Saintonge was able also to send saffron to the markets, and its wormwood—the Santonic wormwood—found a way even out of Gaul to Greece and Rome. Dioscorides speaks of it, and tells us that it comes from Gaul, and that "its name is taken from the region of the Santones, in which it grows." Pliny the naturalist also speaks of the Santonic wormwood, "so named from a state in Gaul." The district of Saintonge contains clay good for bricks and pottery. It contains also several mineral springs.

The town of Saintes, in which Palissy resided, is built on the banks of the Charente, at the foot of a mountain. The old town, founded by the Romans, and called Mediolanum, used to stand at some height on the mountain; that was destroyed by the barbarians upon their road to Spain. Many remains were left, however. Over the new town, built lower down, there looked the ruins of a Roman capitol. The people of Saintes used, and still use, a fine Roman bridge over the Charente, built, it is said, in the reign of Tiberius. A triumphal arch is raised upon it, which had Latin inscriptions on its frieze. Roman monuments abounded. There existed, very perfect in the time of Palissy (and they are still not indistinct), the ruins of a Roman amphitheatre, situated in a hollow, near a suburb of Saintes called St. Eutropius. These ruins were called "The Arches." St. Eutropius is so named from a handsome church which St. Palladius caused to be built over the spot where the remains of St. Eutropius, first Bishop of Saintes, had been discovered. St. Eutropius had been sent out by Pope St. Clement, in the beginning of the tenth century. The church had two choirs, a nave, and a decorated spire; the remains of the tomb of St. Eutropius were in it years ago—some crumbling stones within an iron railing. Of the scrapings from this tomb, a pinch, taken in white wine for nine successive mornings, was supposed to cure all kinds of fever. There are many quarries about Saintes, and near this suburb of St. Eutropius there is a quarry full of petrifications; there is also in the neighbourhood a line of rock, called "The Rocks," abounding equally in relics of past life.

Saintes itself was a walled town of narrow streets, with

low houses, high convent walls belonging to the Benedictine nuns (Ladies of Saintes, whose abbey, situated on the other side of the Charente, gave to the bit of town beyond the bridge the title of "The Ladies' Suburb"), abbeys, bad paths, and obstructive gates. The bridge leading from the Ladies' Suburb ended, on the town side, at a round tower, with a high conical roof, built over the stream, this tower being the town prison. Through that, the traveller entering Saintes passed to a drawbridge placed before the gate connected with the city walls—the bridge-gate, as it was naturally called. On each side of this a little gate led to the river-bank at the foot of the bridge, and another gate, no long way above bridge, called the Gate of the Chapter, opened upon a street leading from the river straight to the Cathedral. There was a main gate, strongly defended, opening upon the main road of St. Eutropius : this was the Bishop's gate. The Squire's gate, on the opposite side—so called because it was the gate nearest to the castle—was a corresponding outlet, equally strong, that opened on another high road. Outside this gate were more ancient ruins, the suburbs of St. Maurice and St. Vivian, with their two churches, and a great monastery of the Cordeliers, which was on the right hand almost immediately after passing out. A gate on this side, at the corner of the city wall abutting on the river, was called, on account of its neighbours, the gate of the Cordeliers. Within the ring of towers and walls environing the city, was a rocky height, forming the upper fourth part of the town. The steep face of this height was ascended by flights of steps, and upon it stood the castle which had in times still older been the dwelling of the famous Paladin Count Roland, and of Counts of Saintes, whose title was then already extinct. In the lower and chief portion of the town there was a spacious old cathedral, dedicated to St. Peter, and said to have been built by Charlemagne. Only the bell tower now remains, and most of the antiquities in which Saintes used to abound must be named in the past tense. A great deal of destruction is attributed to the religious struggles, which were carried on in Saintes with an especial fierceness, and of which some records have hereafter to form part of this biography.

Saintes was, in the time of Palissy, an extensive and

lucrative bishopric, including more than seven hundred parishes. The episcopal seat of Rochelle was, however, scooped out of it in the year 1649.

Saintonge yielded to the king much money in taxes. Of the civil government, which was administered by a seneschal and three bailiffs within the jurisdiction of the Parliament of Bordeaux, it is not requisite to speak at present.

The house of Palissy appears to have been situated in the outskirts of the town of Saintes, for he tells us that at night he heard the dogs barking on one side, and the owls hooting on the other. Glass-painting required, perhaps, the use of more fire than could prudently be permitted in a town, as towns were then built. It is quite possible, however, that Palissy inhabited more houses than one, and did not move towards the outskirts until he commenced experiments in pottery.

Thus labouring for bread among the narrow-minded people of the narrow-streeted town of Saintes, dissatisfied with labour that produced food, and only food, Palissy, conscious of his own strength, hoped that he might yet live to accomplish something better. He had abundant spirit and vivacity. In his darkest hours of evil fortune, he could try like a man to set his friends a-laughing. In the simplicity of his mind, he was at all times full of hope, although unconscious that it was the spiritual sense of power which begot his hopefulness. All that is possible, is certain to the man who wills, if he has wit enough to use a little tact or skill, and a great deal of patience. Palissy had a child upon his arms; land-measuring came only now and then; glass-painting was not attractive; and the inhabitants of Saintes were but a limited population to provide with pictures. The young artist kissed his baby, and buoyed up his wife with his own hopes. There was another baby to kiss, but there was no doubt in his mind about the future.

It was at this time that there was shown to Palissy an elegant cup of Italian manufacture—"An earthen cup," he says, "turned and enamelled with so much beauty, that from that time I entered into controversy with my own thoughts, recalling to mind several suggestions that some people had made to me in fun, when I was painting portraits. Then, seeing that these were falling out of

request in the country where I dwelt, and that glass-painting was also little patronised, I began to think that if I should discover how to make enamels, I could make earthen vessels and other things very prettily, because God had gifted me with some knowledge of drawing." Palissy then knew nothing whatever of the art of pottery, and there was no man in the nation who could make enamels. That last fact was the attraction to him. Enamels could be made; there he beheld a specimen. What is possible, is sure to him who wills, if he can use a little skill and a great deal of patience. To be the only man in France able to make enamelled vases would be to provide handsome support for his wife and children; and to work at the solution of so hard a riddle would be to provide full occupation for his intellect. So Palissy resolved to make himself a prince among the potters, and, "thereafter," he writes, "regardless of the fact that I had no knowledge of clays, I began to seek for the enamels, as a man gropes in the dark."

CHAPTER II.

POTTERY THREE CENTURIES AGO.

HERE it becomes requisite to check the progress of this narrative, and spend some minutes in the labour of dismissing from our minds the familiar ideas which the word "pottery" suggests at the present time. In our bedrooms, at our breakfast-tables, and throughout the day, upon our dining-tables, in our drawing-rooms, and on our mantel-pieces, pottery and porcelain are rarely absent from the sight or touch. It requires, therefore, some effort to recal to mind the rude state of the art of pottery in England or in France three centuries ago. Cups and saucers, as ideas, we must abandon utterly; remembering that Bernard Palissy began to tempt the muse—if we may talk of a muse—of pottery a century before tea came into Europe. Moreover, in those days, if there had been tea, there could have been few tea-services even of Chinese porcelain. It was only during the boyhood of Palissy, in the year 1518, that the Portuguese had appeared before Canton, and, for their service in destroying the pirates of the Ladrões, obtained leave to establish a settlement at Macao. Thence came, by way of Portugal, the first importations of China ware into Europe. Porcellana, the Portuguese name given in the East to a cowrie-shell, was thence transferred to Chinese cups, as indicative of their transparent, shell-like texture.

Porcelain, then, began to be imported as an article of luxury from China in the times of Palissy. During two centuries afterwards, the Europeans laboured in vain to make it for themselves. It is not likely that by Palissy porcelain had at any time been seen or heard of, up to the day when his mind was prompted into action by the sight of an enamelled cup. That cup, having been made in Italy or Germany, of course was composed of an opaque ware, very different from the translucent porcelain.

It is not necessary to dwell here upon the great antiquity of the art of pottery. It arose, early and easily, out of that property of clay which causes it, when in its natural condition more or less moistened, to be plastic, and when baked, to become more or less hard and coherent. There are many kinds of clay, differing greatly in the degree of hardness which they acquire when burnt, and differing much, also, in their result, according to the degrees of fire to which they are exposed. When we walk over a clay soil, in wet weather, we may consider clay to be the worst of earths; but setting aside, for the present, its grand uses in the economy of nature—which we shall find Palissy hereafter fully perceiving—to consider that, without clay, there would have been no pottery, is quite sufficient to establish it in our respect. Of clay, as a plastic material, Palissy himself speaks with a just emphasis, at the same time that he unconsciously supplies us with a catalogue of the chief uses of pottery in his own day. “Consider a little,” he says, “how many arts would be useless, if not altogether lost, without the art of treating earth. The refiners of gold and silver must cease from their work, for they could do nothing without furnaces and earthen vessels; inasmuch as no stone, or other matter, could be found, which might serve to contain melting metals, if there were no vessels of earth.

“*Item.*—The glass-workers must cease from their work, for they have no means of melting the ingredients of their glass, if not in vessels of earth. The goldsmiths, founders, all melting, of whatever sort or kind it may be, would be at an end; and there would not one be found who could dispense with clay. Look, also, at the forges of the farriers and locksmiths, and you will see that all the said forges are made of bricks; for if they were of stone they would soon be consumed. Look at all the furnaces; you will find they are made of earth; even those who labour upon earths use earthen furnaces, as tilers, brick-makers, and potters. In short, there is no stone, mineral, or other matter, which could serve for the building of a furnace for glass, lime, or any of the before-named purposes, which would last for any length of time. You see, also, how useful common earthen vessels are to the community; you see, also, how great is the utility of earth for the covering of houses. You know that, in many regions,

they know nothing of slate, and have no other covering than tiles ; how great do you suppose to be the utility of earth in making conduits from our fountains? It is well known that the water which flows through earthen pipes is much better and wholesomer than that which has been brought through leaden channels. How many towns are there built of bricks, inasmuch as there are no means of getting stones to build them with?"

Coarse jars and pipkins, and such humble specimens of pottery as are alluded to by Palissy, when he points out "how useful common earthen vessels are to the community," were the chief products of French art in the year 1540. They were not quite the sole results ; for Rabelais, a contemporary of Palissy, in his "*Panurge*," first printed in 1546, speaks of the hard pottery of stoneware of Beauvais—its "*Potteries Azurées*"—as very celebrated, and fit to be presented to the kings of France.

There is a common division of pottery into hard and soft. Hard pottery cannot be scratched with a knife. In the year 1540 there was no hard pottery made in France, except the stoneware of Beauvais, and perhaps a little stoneware in some other places. Soft pottery can be scratched with a knife. It is composed of a clay, sand, and lime. The admixture of sand and other materials with clay, to modify the result of baking, was an obvious contrivance, and is found to have been resorted to even in very rude states of society. The woman among the aborigines of Louisiana mixed with clay pounded shells. Then, having shaped her material into a cylinder, of size proportioned to the vessel she proposed to make, she made a hollow in the centre, balanced the clay by this on her wet thumb, and twirled it swiftly round—shaping its edges with her other hand, and twirling still—using the principle without the apparatus of the potter's wheel. The well-formed vessels, when a batch was ready, were then rudely baked over a fire. The shells employed by such a labourer supplied the ingredient of lime, which, mixed with clay and sand, is used in the European manufacture of soft pottery.

Pottery covered with glaze, or enamel, is called *Fayence*. We have not now to deal with the fame of ancient potter's work, and the Etruscan vases, which competed in price with gold and silver vases of their own size in Rome,

under Augustus. The dark ages, the transition period of history, shut us out from them. If, therefore, the ancients employed glaze, that fact does not concern us in the year 1540. The revived use of glaze among the moderns is alike beyond our limits. In the time of Palissy, whatever polish was not proper to the pottery itself was given by a coating of enamel.

The "earthen cup, turned and enamelled with so much beauty," which had given a new direction to the thoughts of Palissy, was either of Italian or German manufacture. Enamelled pottery could not at that time have come from any other country. Except that Hirschvögel, an artisan of Nuremberg, had brought from Italy, in 1507, and practised in his native town, the art of an enameller, the practice ceasing at his death, there was no enamelled ware produced in Europe out of Italy. Certain peculiarities of colouring, an absence of graduated tints, and a frequent presence of figures and coloured ornaments in relief, characterised the enamelling of Germany. The labour of Palissy ended in the production of works similar in character. It is supposed, therefore, by most competent judges that his first enthusiasm was excited by a German model.

The idea, however, from whatever source it came, having been once suggested, the labours of Palissy and their results were altogether of an independent character. Whatever he introduced into France, he introduced out of his own mind. The first introduction of the manufacture of enamelled pottery into France, by artists from Italy, took place in the Nivernois, in the year 1565. An Italian workman is said to have remarked to the duke (Louis Gonzaga) the fitness of the materials existing naturally in the district, and in that way to have given a first impulse to the undertaking. Except by Palissy, the manufacture of fayence was not practised in France until very nearly the conclusion of the century. The enamelled cup, therefore, which Palissy admired in the year 1540, was the work of an Italian or German hand.

In Italy the modern history of pottery begins. The men of Pisa, once upon a time, zealous against infidels—whom there was need to combat, if not for their religious errors, yet at any rate for their political aggressions—the Pisans undertook to clear all Mussulman corsairs out of



PALISSY FRUIT PLATE.

the Tyrrhene sea. There was at that time an infidel king of Majorca, named Nazaredeck, who busied himself cruelly about the coasts of France and Italy. Twenty thousand Christians were said to be confined in the dungeons of this old king of Majorca ; so pure a taste for playing gaoler was almost without a parallel, until we got one in a modern king of Naples. In the year 1113, on the festival of Easter, the people of Pisa were exhorted by their archbishop to open the prisons of their Christian brethren, and to free them from the power of the infidel. The archbishop, in fact, preached a crusade with much success, and the crusaders set sail in the month of August from Pisa for Majorca. But though, no doubt, they were good soldiers, they were exceedingly bad sailors, and they did not get to Iviça till April in the succeeding year. They took that island, and then passed on to Majorca, where they besieged Majorca the town, and took it about Easter, 1115, after a fierce struggle of a year's duration. Nazaredeck, the infidel king, was killed ; his heir-apparent was made prisoner, and carried, with great spoil and booty, into Pisa. Among the spoil were many plates of Moorish pottery, which the Pisans stuck into church walls as ornaments and trophies. Afterwards, it became a custom at Pisa, with warriors who came home from crusades and stopped at Majorca by the way, to bring with them fragments of this painted earthenware. They were tokens of a triumph over the Philistines. Such Majorca plates are, therefore, to be seen embedded in the walls of several old Pisan churches.

For two hundred years this Moorish pottery was regarded only as a thing to be admired for its beauty, and to be venerated as a religious symbol ; it was not till the beginning of the fourteenth century that the Italians began to make an imitative ware, named after the old source of painted pottery, Majolica. The early specimens of Italian manufacture were painted with arabesque patterns, yellow and green upon a blue ground, simple copies from the Moorish. Under the house of Sforza the art was improved, and in 1450 the manufacture of Pesaro had attained great excellence.

The Italian discoverer of enamel was the Florentine sculptor Luca della Robbia, who was born in 1400, and died in 1481. As Luca della Robbia, in the history of

pottery, presents many points of curious analogy with Palissy, it will be well to dwell on some points of his life. Palissy was much more than a potter ; but it is of pottery that we are speaking now, and the invention of enamel. A few points in the life of Luca della Robbia, as told in the words of Vasari, are very interesting in themselves to us who study the career of Palissy, and not the less so, when we remember that Vasari wrote during the same years occupied by Palissy at Saintes in working out the hint supplied by the enamelled cup.

Luca della Robbia, Vasari says, was "carefully reared and educated until he could not only read and write, but, according to the custom of most Florentines, had learned to cast accounts so far as he might require them." Placed then to learn the art of a goldsmith, and having learned to draw and model in wax, he aspired to work in bronze and marble. "In these also he succeeded tolerably well, and this caused him altogether to abandon his trade of goldsmith, and give himself up entirely to sculpture, inso-much that he did nothing but work with his chisel all day, and by night he practised himself in drawing ; and this he did with so much zeal, that when his feet were often frozen with cold in the night-time, he kept them in a basket of shavings to warm them, that he might not be compelled to discontinue his drawings. Nor am I in the least astonished at this, since no man ever becomes distinguished in any art whatsoever, who does not early begin to acquire the power of supporting heat, cold, hunger, thirst, and other discomforts ; wherefore," Vasari says, "those persons deceive themselves altogether who suppose that while taking their ease, and surrounded by all the enjoyments of the world, they may still attain to honourable distinction—for it is not by sleeping, but by waking, watching, and labouring continually, that proficiency is attained and reputation acquired."

To the labours of Bernard Palissy this preface applies even more emphatically than to the labours of Luca della Robbia. Vasari, then, having detailed Luca's career as a sculptor, and the excellence of his works, goes on to relate how marble and bronze were to Luca very much what we have seen glass-painting and land-measuring to be to Bernard. "When, at the conclusion of these works, the master made up the reckoning of what he had received,

and compared this with the time he had expended in their production, he perceived that he had made but small gains, and that the labour had been excessive ; he determined, therefore, to abandon marble and bronze, resolving to try whether he could not derive a more profitable return from some other source. Wherefore, reflecting that it cost but little trouble to work in clay, which is easily managed, and that only one thing was required, namely, to find some method by which the work in that material should be rendered durable, he considered and cogitated with so much good-will on this subject, that he finally discovered the means of defending such productions from the injuries of time. And the matter was on this wise : after having made experiments innumerable, Luca found, that if he covered his figures with a coating of enamel formed from the mixture of tin, litharge, antimony, and other minerals and mixtures carefully prepared by the action of fire, in a furnace made for the purpose, the desired effect was produced to perfection, and that an almost eternal durability might thus be secured to works in clay. For this process, then, Luca, as being its inventor, received the highest praise ; and, indeed, all future ages will be indebted to him for the same."

Vasari, having then told his readers of some works in this enamelled terra cotta, adds that, "The master, meanwhile, was not satisfied with his remarkable, useful, and charming invention, which is more particularly valuable for places liable to damp, or unsuited from other causes, for paintings, but still continued seeking something more ; and instead of making his terra cotta figures simply white, he added the further invention of giving them colour, to the astonishment and delight of all who beheld them. Among the first who gave Luca della Robbia commissions to execute works of this description, was the magnificent Piero di Cosmo de' Medici, who caused him to decorate a small study, built by his father, Cosmo, in his palace, with figures in this coloured earth. * * And it is certainly much to be admired that, although this work was then extremely difficult, numberless precautions and great knowledge being required in the burning of the clay, yet Luca completed the whole with such perfect success, that the ornaments both of the ceiling and pavement appear to be made not of many pieces, but of one only. The fame

of these works having spread, not only throughout Italy, but over all Europe, there were so many persons desirous of possessing them, that the Florentine merchants kept Luca della Robbia continually at this labour to his great profit : they then despatched the products all over the world." Luca then took his two brothers, Ottaviano and Agostino, to assist him, and "they sent many specimens of their art into France and Spain." Passing over other notices of the works of Luca, who began to attempt pictures upon level surfaces of enamelled earth, we will conclude with one more extract from Vasari : "For Messer Benozzo Federighi, Bishop of Fiesole, Luca della Robbia erected a sepulchre of marble, on which he placed the recumbent figure of Federigo, taken from nature with three half-length figures beside ; and between the columns which adorn this work the master depicted garlands with clusters of fruit and foliage so lifelike and natural, that the pencil could produce nothing better in oil-painting. This work is, of a truth, most rare and wonderful ; the lights and shadows having been managed so admirably, that one can scarcely imagine it possible to produce such effects in works that have to be completed by the action of fire. And if this artist had been accorded longer life" (eighty-one years was a tolerable thread), "many other remarkable works would probably have proceeded from his hands, since, but a short time before his death, he had begun to paint figures and historical representations on a level surface."

Luca della Robbia died about thirty years before the birth of Palissy, that is to say, in the year 1481. In 1450, as has before been said, the manufacture of Majolica at Pesaro had attained high excellence. It was patronised by the Dukes of Urbino for two hundred years. Raffaele, born at Urbino in 1483, and dying in 1520, provided a new name for the Majolica. It came to be called "Raffaele ware," under the idea that many of its rich ornaments were painted from his designs. The scholars of Raffaele did, indeed, furnish designs, and supplied them sometimes from drawings left by their great master. Compositions by Raffaele were also often copied upon vessels of Majolica. This was being done in the year 1540, twenty years after Raffaele's death. The year 1540 is the date assigned to the first specimens of the finest Italian

Majolica. It was in the year 1540, when such things were imported into France at a high price from Italy, that there was shown to Palissy "an earthen cup, turned and enamelled with so much beauty, that from that time," he says, in the words already quoted, "he entered into controversy with his own thoughts, and began to think that if he should discover how to make enamels, he could make earthen vessels and other things very prettily, because God had gifted him with some knowledge of drawing." And thereafter, regardless of the fact that he had no knowledge of clays, he began to seek for the enamels as a man gropes in the dark.

CHAPTER III.

*PALISSY RESOLVES TO CONQUER FOR HIMSELF NEW
GROUND—THE FIRST WAR FOR THE DISCOVERY OF
WHITE ENAMEL.*

BENT upon intellectual conquest, Bernard Palissy set forward with energy upon his new career. The man is to be envied who has intellect enough to strike out boldly, with a reasonable purpose, through the brushwood, from the beaten track. With courage to endure all falls and bruises incidental to a traveller on rough and unseen ground, not too particular about that ounce of wool which makes the difference between a whole coat and a ragged one, not angered by the wise men on the highway who shrug up their shoulders, or the ignorant who laugh and hoot at him, the man who makes his own road will enjoy sharp exercise and have a pleasant journey. No bodily discomfort can press down as pain upon the buoyant sense of spiritual freedom.

But men link women to their fortunes. Whoso with lusty mind desires to fight beyond the common limits of his time, and stand on ground through which there is to be no road for the next fifty, hundred, or two hundred years, should take good heed what partner he selects to share his scratches and to see him made into a common jest. She must either have a strength of intellect accorded to few men and women in a generation, or a strength of love almost as rare. Palissy married as a glass-painter—a clever man, able in two or three odd ways to add to his resources, and maintain a household in a lowly sphere of life. His wife, joining him out of the same rank in society, was doubtless quite prepared to bear with him, and to console him under all those seasons of inevitable poverty which might arise from dearth of occupation. But could she have imagined that a man so clever would

neglect his occupation, let his earnings become less, and out of that less would buy pots only to break them?

"Without having heard," says Palissy, "of what materials the said enamels were composed, I pounded in those days all the substances which I could suppose likely to make anything; and having pounded and ground them, I bought a quantity of earthen pots, and after having broken them in pieces, I put some of the materials that I had ground upon them, and having marked them, I set apart in writing what drugs I had put upon each, as a memorandum; then, having made a furnace to my fancy, I set the fragments down to bake."

The purchase of the drugs, the buying of the pots, the building of the furnace, and the loss of time from customary occupation, made, of course, a very serious impression on the household purse. The wife cared naturally more about her children than about the best of white enamels, but she, doubtless, had consented with not much reluctance to the present sacrifices. It seemed to be quite true that if Bernard discovered the enamel, he would make them rich. How difficult the task might be it was impossible to foresee; of course it would be difficult, but then Bernard was clever. Let the old funds fall, therefore, since there really was hope of a new and rich investment.

So the old funds fell. Ordinary work was to be done only at the call of strict necessity. The enamel when discovered—if discovered—would be useless except as a covering to ornamental pottery, and Palissy would have to learn how to make that. He set himself to rival the enamelled cups of Italy, when he would have failed in an attempt to make the roughest pipkin. He knew nothing of clay, and he had never even seen the inside of a pottery. He "had never seen earth baked." But what of that? Enamelled cups were made in Italy; why should they not be made also in France?

Household cares bound Palissy to home. It was requisite to abide by and support his family. Had he been free, he could have wandered among potters, as he had already wandered among alchemists. He could have acquired all that was already known of pottery in France, and started from that more advanced point on his journey through the undiscovered region. But the discovered was

to him unknown. From absolute ignorance to a point far beyond the knowledge of his time he was to feel his way on without a teacher.

"I know," says Theory to him, in one of his own dialogues, "that you endured much poverty and pain in searching, but it will not be so with me; for that which gave you so much to endure, was the fact that you were entrusted with a wife and children. Then, while beforehand you possessed no knowledge, and were forced to guess your way, through this you were unable to quit your household to go and learn the art in some shop, and you had no means of engaging servants who might help you somewhat to discover the right way. These drawbacks were the cause of your checks and miseries; but it will not be so with me, because, according to your promise, you will tell me in writing all the means of obviating the losses and hazards of the furnace; also, the materials of which your enamels are made, and their proportions, measures, and composition. You doing so, why shall I not make pretty things without being in danger of any loss, provided that your losses serve as an example to protect and guide me in the exercising of your art?"

The first experiment was the first loss. Palissy had made a furnace in his house, which he thought likely to be suitable; and he had strewed upon many broken bits of pottery many chemical mixtures, which he then proposed to melt at furnace-heat. It was his hope that, of all the mixtures, one or two might run over the pottery, when melted, in a form which would convey to him some hint of the composition of the white enamel. He had been told that white enamel was the basis of all others, and sought only for that. "I set the fragments down to bake," he says, "that I might see whether my drugs were able to produce some whitish colour; for I sought only after white enamel, because I had heard it said that white enamel was the basis of all others." In the selection of his chemical ingredients he had more than chance to guide him. It is to be remembered that he had been familiar for many years with such metallic colours as are used in glass-painting, and to a certain extent with their behaviour when exposed to fire. Some facts, therefore, he had to suggest hints to him in the mixing of those chemicals which he distributed upon the bits of earthen-

ware, and put into his furnace, each duly marked, and a memorandum of the exact contents of each against a corresponding mark set down in writing.

The plan of the experiment was promising. The words of Palissy himself will best relate and account for its repeated failure. "Then," he says, "because I had never seen earth baked, nor could I tell by what degree of heat the said enamel should be melted, it was impossible for me to get any result in this way, though my chemicals should have been right; because, at one time the mass might have been heated too much, at another time too little; and when the said materials were baked too little or burned, I could not at all tell the reason why I met with no success, but would throw the blame on the materials, which sometimes, perhaps, were the right ones, or at least could have afforded me some hint for the accomplishment of my intentions, if I had been able to manage the fire in the way that my materials required. But again, in working thus, I committed a fault still grosser than the above-named; for, in putting my trial-pieces in the furnace, I arranged them without consideration, so that if the materials had been the best in the world, and the fire also the fittest, it was impossible for any good result to follow. Thus, having blundered several times at a great expense, and through much labour, I was every day pounding and grinding new materials, and constructing new furnaces, which cost much money and consumed my wood and my time."

Through many successive months Palissy persevered in these experiments. The building, destroying, and rebuilding of furnaces, in which the chemicals he bought with household money were always only burnt and spoilt, was anxious labour. Wood was then the fuel used throughout the country. It was not too cheap; and Bernard had to take not only food out of his kettle, but also wood from under it, when he bought drugs and burnt them in his furnace-fire. He "fooled away," he tells us, in this manner, "several years." "With sorrow and sighs," he adds—for the bread of his children lessened—he was weighed down by domestic care. This time was not, however, wasted. When men grope in the dark, it is by touching on all sides upon what they do not seek that they at length find what they desire. Palissy knew

this well ; and though his heart was troubled for the souls that waited on his industry, he steadily continued groping, and employed his old arts only for the earning of a bare subsistence, and to help him in the purchase of his chemicals. Perhaps he had already incurred some debt.

His narrow means were quite unable to support a full continuance of these experiments. If he would not be ruined long before he could attain his purpose, he must work for its attainment with economy. The most expensive part of his system, both as it regarded time and money, had been the building and rebuilding of his furnaces, the watching them, and feeding them with fuel from his kitchen. "Therefore," says Palissy, "when I had fooled away several years thus imprudently, with sorrows and sighs, because I could not at all arrive at my intention, and remembering the money spent, I resolved, in order to avoid such large expenditure, to send the chemicals that I would test to the kiln of some potter, and having settled this within my mind, I purchased afresh several earthen vessels, and having broken them in pieces, as was my custom, I covered three or four hundred of the fragments with enamel, and sent them to a pottery distant a league and a half from my dwelling, with a request to the potters that they would please to permit those trials to be baked within some of their vessels. This they did willingly." The man who bought and broke so many pots was a good customer to potters. He was a proper man to be obliged. Probably he paid also some money for his privilege.

With how much trepidation Palissy watched the departure of his first batch of three or four hundred potshards, with a little powder sprinkled upon each—with how much fear lest the powders be all spilt upon the way he gave his last directions—we may easily imagine. The arrival of the fragments in the absence of their owner was no doubt a great joke at the pottery. The potters, however, baked them with all due solemnity ; and before the appointed time Palissy was present with a palpitating heart to wait the drawing of the batch. "But when they had baked their batch," he says, "and came to take out my trial-pieces, I received nothing but shame and loss, because they turned out good for nothing ; for the fire used by those potters was not hot enough, and my trials were not

put into the furnace in the required manner, and according to my science. And because I had at that time no knowledge of the reason why my experiments had not succeeded, I threw the blame (as I before said) on my materials ; and ——” And what? There was but one course to pursue—“beginning afresh.” The man can achieve nothing who despairs. “And beginning afresh, I made a number of new compounds, and sent them to the same potters, to do with as before ; so I continued to do several times, always with great cost, loss of time, confusion, and sorrow.”

But the family of Palissy kept pace in increase with his perplexities. The beginning of his groping was not fortunate ; in his war against difficulty he was worsted for the present, although, of course, quite unsubdued. The private furnace and the potter's furnace, both had failed, and had together wasted terribly his home resources, while the home wants had increased.

When we are foiled repeatedly in an endeavour to adjust some point exactly to our wish, and our reiterated attempts, at last, have brought our wits to “confusion and sorrow,” it is a common and wise practice to cease from effort for a while—to think no more, if possible, upon the subject which has occupied our thoughts too much. Then when, after an interval of rest, we come back to the old knot, it happens now and then that we untie it easily. Considering this matter, and perceiving well how much his family required that he should do a little steady work on their behalf, Bernard resolved to close this his first struggle for the discovery of white enamel. With his own charming simplicity, Palissy himself tells us : “When I saw that I could not at all, in this way, come at my intention, I took relaxation for a time, occupying myself in my art of painting and glass-working, and comported myself as if I were not zealous to dive any more into the secret of enamels.”

CHAPTER IV

A TRUCE: THE GABELLE AND THE SALT-MARSHES OF SAINTONGE.

PROSPERITY soon began to sit in Bernard's chimney-corner. If his wife had grieved over the wasting of their home resources during that hard struggle which appeared so profitless in its result, she had her consolation now. The tide in their affairs turned rapidly. Palissy "comported himself as if he were not zealous to dive any more into the secret of enamels," and prepared heartily to resume those occupations by which he had formerly obtained a living. A bright flood of sunshine suddenly poured in to chase the gloom out of his dwelling. The time of Palissy was soon completely taken up with that which he had considered at all times the most profitable of his occupations. In consequence of an edict given from Saint Germain-en-Laye in May of the year 1543, it became necessary that the islands of Saintonge and the district surrounding the salt-marshes should be surveyed. For this task there was no man in the diocese more competent than Bernard Palissy. Accordingly, as he tells us—having suspended his war for the discovery of white enamel—"Some days afterwards there arrived certain commissaries, deputed by the king to establish the gabelle in the district of Xaintonge, who appointed me to map the islands and the country surrounding all the salt-marshes in our part of the world."

The gabelle is a familiar word, connected intimately with a very well-known story. Nevertheless, it may be advisable, before we pass on to the illustration of this period in the life of Palissy, to note six or eight facts concerning that famous impost in the days when it was young, and ascertain what aspect a gabelle presented in the year 1543 to the rough people of Saintonge.

Gabelle, meaning a tax, is a word common to many

languages ; it is by no means peculiarly French, nor has its original meaning in France, or any other country, been confined to taxes levied upon salt. Formerly there were gabelles in France on wine, on draperies, on cattle ; six years after the date which we have now reached, and in the time of Palissy, an edict of Henry II., dated September 10, speaks of a gabelle on drugs and spices. There was also, among others, a gabelle on salt ; and for the tax on this commodity, by slow degrees, the name gabelle, already in Palissy's time, was beginning to be used in France as a specific term.

It is, of course, only as a tax on salt that the gabelle concerns this history. There was no salt tax at all under French kings of the first and second line. Salt makers, on the contrary, were somewhat favoured. Charlemagne reserved to himself the task of personally settling their disputes. The seigneurs of the ninth century exercised, of course, a little profitable jurisdiction over vessels laden with salt on their domains, as in Lorraine and Franche Comté ; but royal rights were not at that time in existence.

A trifling salt tax began to appear here and there—probably not very long after the establishment, by Hugh Capet, of the third race of kings. Immunity from a gabelle on salt is found to occur among the privileges given by Louis IX. (Saint Louis) to the town of Aigues-mortes, and he was then confirming privileges granted in 1079 by Philip the First.

The first decree that has been found having direct reference to a gabelle on salt, speaks of it as a tax already existing. It belongs to the reign of Philip V., who therefore commonly receives the credit of having been the inventor of one of the most oppressive taxes against which a civilised nation ever has had reason to rebel. The first mention of it is already ominous. The royal order bears date February 25, 1318, and his majesty therein, "since it had come to his knowledge that the gabelle on salt gave much displeasure to his people," summoned his prelates, barons, and so forth, to talk over that and other matters.

The tax at that time—like our modern income tax—professed to be only temporary ; but the people feared that it would be permanently fastened on their backs. At the

council which he had convoked, King Philip declared that he was quite sincere in wishing to remove the salt-tax as soon as possible, and that he would gladly remove it on the instant, if better means could be devised by any one for meeting the expenses of his wars. The tax was then a small one, of two deniers upon the pound.

The next king, Philip VI. (of Valois), was compelled by his struggles with the English to increase the tax. On the 20th of March, 1342, he established a system for supervision and storage of the salt, and appointed officers of the gabelle. The tax was doubled, and became four deniers upon the pound ; but it was not to be perpetual. In 1350 salt is found to be included among free articles of commerce.

In 1355, the successor of Philip of Valois, John II. of France, imposed a gabelle on salt, and again doubled the tax, so that it then rose to eight deniers upon the pound. The more the people had to pay, the more they grumbled. This tax, therefore, perished ignominiously in three months, a less obnoxious measure being substituted. But John having been soon afterwards captured by the English, it became necessary to make extraordinary levies for his ransom. In 1358, the states met at Compiègne re-established the gabelle ; it was extended in 1359 over some districts previously privileged, and still further extended in 1360. It was decreed that storehouses should be established in district towns for the more efficient levying of the royal rights, and that in places without storehouses the king should receive one-fifth of the selling price. In 1363 the gabelle was so strict that payment was enforced from fishermen for salt used in salting the fish they caught, and from dwellers on the marshes for salt used in their own families. Preventive officers were on the watch for all salt which changed hands without paying the king his share of the purchase money ; such salt was confiscated, heavy penalties were levied on offenders, and other precautions against fraud were established of a kind not likely to be popular. He who had salt to sell must take it to the government storehouse. There it would be sold for him by the government officials when his turn should come. Each storehouse was locked with three keys ; the government controller had one, the owner of the salt another, and a notary kept the third. To avoid any

collusion, storekeepers and notaries were forbidden to hold social intercourse with salt merchants, or to receive presents or communications from them. Whether it was in consequence or in spite of these immense precautions I will not attempt to decide, but certainly the king found himself defrauded of a very large portion indeed of the gabelle he claimed.

In the year 1380, Charles VI., being pressed sorely by his subjects, abolished the salt-tax. In the year 1382, having quenched the tax-hating Parisians by force of arms, he restored the gabelle on salt, which thenceforward continued unrepealed for centuries.

In Saintonge, in the year 1388, the seller paid as tax half the price obtained for his salt on a first sale; the same salt, whenever it was sold again, paid five sols on the pound. They who conveyed untaxed salt were liable for the offence with goods and body.

We may come now to the century with which we are especially concerned. Royalty having been greatly cheated of the dues it had thought prudent to exact on salt, found it necessary, between the years 1500 and 1508, to issue ordinances forbidding individuals to acquire exclusive right of supplying local storehouses, regulating the order in which sales should take place, and other matters. In June, 1517, the same king, who still reigned in the year 1543, and under whom Palissy received his commission to survey the marshes of his neighbourhood—Francis the First—ordered that storekeepers and controllers, having charge of local storehouses for salt, should keep a register of all the people in their district by whom salt was to be bought, arranged according to their parishes. The collectors of the impost—elected by the parishes—were ordered to transmit to the storekeepers and controllers a duplicate list of the names and surnames of all the inhabitants in each parish, the number in each family, and the amount of tax assigned to it. For, whereas it is a common consequence of taxes upon articles of necessary consumption to reduce the quantity consumed, it was resolved that this gabelle should be held free from any inconvenience of that nature. The head of every family was informed how much salt the king wished him to use every year. The storekeepers and controllers were ordered by this edict of Francis I. to make domiciliary visits in

each of their parishes ; and if they detected any one who did not procure salt from the appointed district storehouse, or did not procure the quantity proportioned to his wealth, or to the number of his family and household, the defaulter so detected was to be condemned to heavy penalties.

Up to the period of this edict, and beyond it to the year 1541, salt in the storehouses was sold for the merchants by government officials, who retained the taxes, and paid over the balance to its owners. In 1541, it being found that the most stringent laws remained still powerless to prevent extensive fraud, the plan of tax-gathering was altered. Francis caused an estimate to be made of the quantity of salt yearly producible in the marshes of Languedoc, Guienne, Bretagne. This, it will be observed, took place two years before Bernard Palissy received his commission to survey the marshes of Saintonge. It was decreed that salt should thenceforward pay tax as it was taken from the marshes. Francis hoped thus, by forestalling the opportunities of fraud, to raise a larger tax at less cost to the people. This edict abolished storehouses and all their officers ; but it raised up a new set of conservators, controllers, guards, measurers, &c., and it set a band of spies about the salt-marshes. The merchant having paid his tax, and obtained a permit in which his name was written, with the quantity and price of salt and receipt of the gabelle, might go into the market when he pleased. In the marshes of Saintonge, the right of gabelle was equal to the market price of the salt itself ; the market price being fixed for the traders every month by the conservator, the attorney for the king, guards, and controllers. The price of salt, therefore, was doubled to the public as it issued from the marshes. Having once escaped into the country, it had of course to be sold and resold in the towns and villages. Every time it was sold it paid a tax. This tax was no less than a quarter of the price obtained on each occasion. Upon each fresh sale, therefore, by which the original mass of salt brought from the marshes was dispersed among retailers, its price augmented terribly ; and when it got into the lanes and villages, it was precisely to the poorest people in the land that the salt had to be sold at its highest artificial price. No sales were allowed in any place where there were not

officers provided to enforce the payment of "the king's quarter."

But with all this reckless energy of taxation, difficulties and diversities and frauds still perplexed the tax-receiver. In the very next year, 1542, Francis was altering his plans ; and in April lowering the home tax, in consideration that he meant thenceforward to levy also upon foreigners. He ordered, in fact, one uniform tax to be levied on all salt sold or bartered at the *salines* and marshes of Bretagne, Poitou, Saintonge, the town and government of Rochelle, Guienne, Picardy, Normandy, Languedoc, Provence, Dauphiné, and other provinces and places of the kingdom, "with whatever persons it might be, his subjects or others, excepting none."

The taxation was then obviously mad. The salt merchants and proprietors of marshes humbly represented that if salt for exportation was to pay gabelle, there would be no salt exported, so the king would gain nothing, while their commerce would be lost ; the same law, if not repealed, would put a complete stop to the fisheries. This having been made clear to the royal comprehension, there was a new decree made on the 29th of May, 1543. A small tax was imposed, instead of the gabelle, on salt taken by foreigners. The fishers of Saintonge, &c., were freed from the gabelle for salt taken from the marsh for use in their own trade. The proprietors of marshes residing on the spot, or within ten leagues of it, were honoured with permission to retain a fixed quantity of their own salt untaxed for domestic use. The inhabitants of Bretagne were exempted from gabelle on salt used for their own consumption. The gabelle, which had been reduced with the design of making foreigners enjoy a share of it, had again to be raised at home ; and leave was given, when the whole amount of salt-tax payable by any one person was high, that it should be paid in four equal instalments. It was in this decree that for the securing of the rights of gabelle in Saintonge a survey of that district was commanded. The conservator of Saintonge, governor of Rochelle, with his notary, were established for the first time at Saintes, and Palissy received then his commission to prepare a map.

I may add, that in the same year, 1543, the old system of district storehouses was re-established, and officers

appointed in the old way to conduct the sales. How the people of Saintonge—who were not of the civilest—liked these arrangements, will be seen as we pursue the narrative ; to which we now return.

While we are contemplating the first struggles of Bernard Palissy towards the discovery of white enamel, and noting some of the embarrassments occasioned by his poverty, we must not omit to consider that his energetic efforts to dive into one secret of art did not suffice to fill or satisfy his mind. Bernard was too good an economist to spend a life on any one idea. His quick eye and shrewd wit were ever busy on the mysteries of Nature. Ignorant man as he was—happily ignorant—in all the learning of the schools, he had observed the chemists and the schoolmen quite enough to see that, as naturalists, they were all lost in a wilderness of theory. Palissy being gifted with the perfect temper of a naturalist—being, in the words of Buffon before quoted, “so great a naturalist as Nature only can produce”—with wonderful simplicity and strength of mind (qualities essentially allied) devoted himself wholly to experiment and observation. With a mind of the finest philosophic quality, unprejudiced by any theory, Palissy observed minutely all the ways of Nature, reasoned upon them with natural vigour, and in those matters upon which he reasoned thus, he in the end outstripped by a century or two the knowledge of his contemporaries. At this stage of our narrative we must not lose sight of the fact that Palissy, while he was searching for the white enamel, and while he was measuring the marshes of Saintonge, was at the same time watching assiduously the ways of Nature, and reasoning upon her mysteries with patient care.

Of the profitable task assigned to him by the commissioners of the gabelle, Palissy has left us some memorial in an account of the salt-marshes of Saintonge. The subject of salt seems to have been one of the first which had arrested his attention as a naturalist ; and as, in stating his opinions about it, he draws frequent illustration from experience acquired during his early travels, there is good reason to suppose that in the year 1543, at which our narrative now stands, Palissy had already arrived at some of those conclusions which he afterwards developed in his writings. Since he himself takes care to place before his

account of the salt-marshes his theory concerning salts, it may be advisable, before we pass to his survey, to indicate, by a few sentences, how far his unassisted wit was taking him beyond the knowledge of his time. Remembering that he lived when there were said to be four elements, and two hundred and fifty years before there was any philosophic chemistry, let us see what sort of self-taught science could be talked by the illiterate glass-painter.

Using the form of dialogue and the name of "Practice," by which he commonly distinguishes his views from those of the schoolmen, he astonishes "Theory" by speaking of plurality of salts, and says : "I tell you that there is so great a number of them, that it is impossible for any man to name them all ; and tell you further, that there is nothing in this world which has no salt in it, whether it be in man, the beast, the trees, plants, or other vegetative things, or even in the very metals ; and tell you yet more, that no vegetative things could grow without the action of salt, which is in seeds ; what is more, if salt were taken from the body of a man, he would fall to powder in less than the winking of an eye. If the salt were separated from the stones that are in buildings, they would fall suddenly to powder." "Copperas is a salt, nitre is a salt, vitriol is a salt, alum is a salt, borax is a salt, sugar is a salt, sublimate, saltpetre, &c. . . . all those are different salts ; were I to name them all I never should have done." "You must not suppose that the ashes of plants have power to blanch linen except by virtue of their salts ; otherwise they would admit of being used several times. But inasmuch as the salt in the said ashes comes to dissolve in the water that is put into the copper, it passes through the linen," &c. &c. "Salt bleaches everything : salt hardens everything : it preserves everything : it gives savour to everything : it is a mastic which binds everything : it collects and unites mineral matters, and of many thousand pieces makes one mass. Salt gives sound to everything : without salt no metal would yield a voice. Salt rejoices human beings : it whitens the flesh, giving beauty to reasonable creatures : it preserves friendship between the male and female, by the vigour given to the sexes : it gives voice to creatures as to metals. Salt causes many flints, when finely pow-

dered, to combine into a mass, forming glass and all kinds of vessels : by salt, all things can be converted into a translucent body. Salt causes all seeds to vegetate and grow.

“And though there be few people enough who know the reason why manure is of service to the seeds, and they are induced to bring it only by habit, not by philosophy, yet so it is, that the manure carried to the fields would be quite useless, if it were not for the salt which the straw and the hay deposited in rotting ; wherefore they who leave manure-heaps at the mercy of the rains are very bad managers, and have neither acquired nor innate philosophy. For the rains which fall upon the heaps, running off down any declivity, carry with them the salts of the said manure, which will have been dissolved by the moisture, and on this account it will no longer be useful when it is taken to the fields. The thing is easy enough to believe ; and if you will not believe it, watch when the labourer shall have carried manure into his field ; he will put it, when unloading, into little piles, and he will come after a few days to scatter it about the field, and will leave none on the spots where the said piles have been ; and for all that, when such a field shall have been sown with grain, you will find that the grain will be finer, greener, thicker, on the places where those piles had rested, than in any other part ; and that happens, because the rains which fell upon the said hillocks took with them the salt in passing through and descending to the earth ; by that you may know that it is not the straw which is the cause of generation, but the salt which the seeds obtained out of the ground.” “By that, too, you will understand the reason why all excrements can aid in the generation of seeds.” “When God formed the earth, he filled it with all kinds of seeds ; but if any one sows a field for many years without manuring it, the seeds will draw the salt from the earth for their increase, and the earth, by this means, will find itself deprived of salt, and will be able to produce no more ; wherefore it must be manured, or left at rest some years, in order that it may regain some salitude proceeding from the rains or snows. For all earths are earths, but some abound much more in salts than others. I do not here speak only of a common salt, but of salts that are vegetative.”

Professor Liebig comes to our mind in reading passages like this. But Liebig is a chemist highly trained in the knowledge of our own day. Palissy was an illiterate man of genius, born of humble parents, in a miserable state of human society, three centuries ago.

We may now take part with "Theory," and say to Palissy: "Describe to us the way of making common salt, as it is practised in the islands of Xaintonge, and show us a plan of the form after which the salt-marshes are made, for you know it very well, since we have heard it said that formerly you were upon the spot, with commission to make a plan of the said marshes."

"That is quite true," Palissy answers; "it was at the time when they resolved to establish the gabelle in the said country. Now since you desire to understand these things, let me have audience, and I will cheerfully give you an account of them, and then I will let you see a plan.

"In the first place you must understand that inasmuch as the sea is almost entirely bounded by great rocks, or lands higher than the sea, for making the salt-marshes it has been necessary to find some plain lower than the sea; for otherwise it would have been impossible to find means of making salt by the heat of the sun; and it must be believed that if there had been found in any other part of France bordering on the sea, a spot proper for forming marshes, there would be such things in many places. Now it is not sufficient to have found a plain or country lower than the sea; but it is also requisite that the earths on which one proposes to establish marshes be tenacious, clammy, or viscid like those of which are made pots, bricks, and tiles.

"There is a seigneur of Antwerp who has spent a great deal upon the endeavour to make marshes in the Netherlands, according to the form and semblance of those in the islands of Xaintonge; but though he has found plenty of low ground upon which he can bring the water of the sea, notwithstanding this, since the earth was not clammy or tenacious like that of Xaintonge, he could not succeed in his intention, and his expenses have been lost; because the earths which he caused to be dug for the forming of the said marshes being dry and sandy, were unable to contain the water.

“Although our predecessors of the Xaintonic islands have found certain flat or low lands on the margin of the sea, and the earths at their foundation have been found naturally clammy or argillaceous, yet that has not sufficed for the attainment of their design; for it has been necessary to invent a way of beating the said earth in the manner which I will explain to you hereafter.

“If our said predecessors had not used great judgment and consideration in forming the salt-marshes, they would have done nothing that would have been of value; having then considered upon the grounds lower than the sea, they found that it was necessary to cut a channel which might bring readily the sea-water to the desired spots, for the making of the salt. Having thus dug certain channels they caused the sea-water to come into a great receptacle which they named the IARD; and having made a sluice to the said IARD, they made at the end of the same other great receptacles which they named CONCHS, into which they allow the water of the iard to run in limited quantity, and from these conchs they cause the water to pass through sieves of pierced planks, and by very tortuous passages, descending slowly by a series of steps, that it may finally arrive, after much evaporation, in the great square of the salt-marsh.

“These things have not been made without great labour and expense of time; it has been necessary to excavate the square of the marsh-field at a level lower than the canal coming from the sea, lower also than the iards and conchs, in order to give slope or inclination to the steps and parts above named in order to convey the water into the great square of the marsh. And it must be noted that in hollowing this great square it has been requisite to heap the earth and rubbish all about the border of the said square, which being put about the border makes there a great platform which they call BOSSIS, upon which they are able to put great mounds of salt, called cows of salt (*VACHES DE SEL*); and when it happens in winter that the season for making salt is passed, they cover the said mounds of salt with rushes, which have a good sale on account of their utility. The said bossis serve also in going from marsh to marsh for the passage of men and horses at all times; and it is requisite that they should be of a great size, because when any one has sold a cow or

two of salt, according to the distance at which the salt lies for carrying into the ship, it is necessary for those in distant places to use a great number of beasts to carry the salt on board, and that is done with a marvellous diligence ; so that one might say, who had never seen it done before, that they were squadrons bent upon fighting one another. There are people on board the vessel who do nothing but empty the sacks, and another marks, and each beast carries but one sack at a time ; and those who drive the horses are commonly little boys, who directly the horse is unloaded and the salt discharged, throw themselves with speed upon the horse, and do not cease to gallop post-haste to the cow of salt, where there are other men who fill the sacks and load them upon the horses, and being re-loaded, the said boys lead them back promptly to the vessel. And inasmuch as from one side and the other all go and come busily, it is requisite that the said bossis or platforms should be tolerably large, or else the horses would impede each other.

“Understand now the industry which it has been requisite to use in making the marshes fit, so that the earth shall not absorb the water put there to deposit salt. When the great square has been scooped, and the rubbish cleared from it, before the steps and ways are made by which it is connected with the iard, they have a number of horses and mares, which they fasten to one another so that they may be led, then they put them into the said great square where they wish to form the marshes. There is a person who holds the first horse by one hand, and has in the other hand a whip, who busily leads about the said horses and mares, until the earth underfoot has been well stamped and is able to hold water as if it were of brass.” “After the earth has been thus stamped they form their” (connecting channels, &c., from the iard) “as if they moulded them in potter’s earth ; you see now why I before told you that though one could find places lower than the sea, it would be impossible to prepare salt-marshes if the earth were not naturally argillaceous or viscid, like that of the potters.

“There is another great labour which our predecessors have found it proper to undertake in preparing the marshes ; there can be no doubt that the first who formed them chose places as close as possible to some natural channel :

for if there were no channel it would be difficult to bring the salt made on the marshes to the ship in the great sea, because great ships cannot approach the coast by reason of their size ; wherefore they who sell salt, take little barks which penetrate the flat country and come as near as they can to the salt which has been sold ; they cast anchor, and so the said salt is brought first into the bark, then the said bark is taken to discharge into the ship ; and it is to be noted that most frequently, by certain channels, entrance can be made only at high water ; and to pass out, if the sea has retired, it becomes necessary to wait for the tide.

“And though some natural channels have been found, notwithstanding this it has been necessary to aid nature ; in order that the barks and little vessels may approach the places where the salt is made ; and it is not to be doubted that our predecessors have also been constrained to form channels in places where they did not exist by nature ; for otherwise they could not get the salt out of the said marshes. Therefore it all looks like a labyrinth, and one could not pass to the distance of a league without travelling six, because of the deviations one would have to make ; and if any stranger were enclosed there, he would scarcely find a way out without a guide ; because he would have to find a great number of bridges, which he must seek one to the left another to the right, sometimes in a direction exactly opposite to that in which he is going ; for it must be understood that all the plain of the marshes is hollowed into canals, iards, conchs, or marsh-fields ; some of the said fields are square, and others long and narrow, others run aslant, in order that all the ground may be employed in the formation of marshes ; just as in a town the first builders have commonly taken a place squared according to their own convenience, and the last have occupied the nooks and vacancies left by the others, as they were to be found. The like has happened in the marshes ; for the first have occupied a place at their convenience as near as possible to the great channels and to the sea, and the last comers have taken places not exactly such as they desired, but they have formed their ground sometimes on spots very distant from the channels and the sea-coast, for which reason they find fewer purchasers ; inasmuch as the cost of carrying their salt becomes too great.

"Others have constructed marshes of little value, because very often the water fails them at the time of greatest need, inasmuch as the channels, iards, and conchs are not low enough in their level to receive sea-water always when they want it ; and a singular point has here to be noted, which is that in each marsh there is a canal made by labour of men, to bring the sea-water into the iard, and other channels like small rivers, which serve for the passage of barks between the several marshes, in which they carry the salt to the great ship, as I said before.

"By such means all the earth of the valley of the marshes is laboured, dug, and trenched for the use and service of the said salt, and for these causes I have said already that if a stranger were in the midst of the marshes, though he could see the spot which he desired to reach, he scarcely could arrive at it ; inasmuch as very often he must travel back to look for the bridges ; also because he has no road or way except upon the bossis, which are built in oblique lines, and it is not possible to find road or way in the said marshes other than the bossis, which have been built high because the soil dug from all the marsh-fields has been heaped there ; and if one were there in winter, one would see all the said fields covered with water like great lakes, without any appearance of their form. On this account some painters, when they had been sent into these isles to know the reason why it is impossible for an army to march over the said salt-marshes, have been deceived ; inasmuch as they visited them in the season when the water was spread over the said marshes, and took back with them inaccurate plans."

Palissy proceeds to relate how this happened to a certain Master Charles, whom he calls an excellent painter. It is very probable that inaccuracies and inconsistencies prevailing in the maps formerly supplied to government had partly caused the order for that fresh survey upon which Bernard had been occupied. The marshes were flooded every winter, in order that the dikes and passages formed in the clay, being protected under water, might not suffer from the destructive bite of frost. The custom of flooding thus saved to the proprietors yearly a very large sum for repairs.

The salt was (and is) made by evaporation during the hot months, the season extending from the middle of

May to the middle of September. Upon the details given by Palissy on the subject of salt-making we must not dwell. They are not less distinctly set forth in his treatise than the view of the marshes, which he has painted for us in his own methodical and lively way. It must suffice for us to note, that the iards were replenished twice in the season, during the high tides of March and July ; so that if an unusually hot summer chanced to dissipate the store, there was a loss of time and money. In a wet summer no salt could be made. If, during a whole day or night, rain fell upon salt drying in the marsh-field, Palissy informs us, "Even if the rain lasted two hours, no salt could be made for fifteen days afterwards—because it would be necessary to cleanse the marshes, and to take all the water from them, as well the salted as the fresh—so that if it were to rain once in every fifteen days, salt could never be made by the heat of the sun ; wherefore we must believe that in rainy and cold countries salt could not be made as it is made in the islands of Xaintonge, even though they possessed all the conveniences already mentioned."

Palissy also takes some pains to point out the vast quantity of wood dispersed between the embankments and among the labyrinth of marshes, in the form of gigantic sluices, bridges, beam-partitions, and sieves ; much of it consisting of the very largest timbers. "I tell you this," he adds, "that you may understand that the wood in the marshes being rotted or burnt, the forests of Guienne would not suffice to replace it. And there is no man, having seen the labour of all the marshes of Xaintonge, who would not judge that it cost more expense to form them than would be necessary for the building of a second town of Paris." This last fact will appear less startling when we remember that three centuries ago Paris was not by any means a capital which we should now call large. But at that time the labyrinth of marshes in Saintonge formed the most important source of salt in Europe. During three centuries the salt-marshes of Saintonge have decayed in fame and substance ; they were long since distanced in competition by the salt-marshes of Brittany. In the meantime, Paris has become a place which all the world is learning to regard with wonder.

From the account which Palissy has given of the marsh district, we may perceive that it involved no slight labour to survey it accurately. Hard at work during the dry season of 1543, and mapping the adjacent towns and villages during the winter, when the marshes were all flooded—Palissy brought his work to a conclusion certainly before Midsummer in the succeeding year. An edict of St. Maur des Fosses, dated in July, 1544, is subsequent to the completion of the survey.

“Then,” says Palissy, “when the said commission was ended, and I found myself paid with a little money, I resumed my affection for pursuing in the track of the enamels.”

CHAPTER V

SECOND PALISSIAN WAR FOR THE DISCOVERY OF WHITE ENAMEL.

UNDAUNTED by the failure of his early efforts, and relieved for a while from care about his household bread, Palissy no longer "comported himself as if he were not zealous to dive into the secret of enamels." If the thrifty wife had calculated upon long possession of a hoard of money, retained from the profits of the marsh-surveying, to which she could have recourse at any season of unusual pressure, she was quickly undeceived. Let us not spend all our admiration on the inflexible energy with which we shall find Bernard Palissy battling his way on through adversity ; sympathy is due to her who, as his wife, stood by him in the contest, sharing all the blows he suffered, unable to comprehend the battle that he waged. If she repined a little when she looked down on her ragged dress, during the years of struggle, and knew that her husband could have earned her bravery and ribbons ; if she complained much when she saw her children hungry, can we say that she was weak ? The first act which Bernard chronicles, as opening the second war for the discovery of white enamel, was of a kind likely to terrify the most placid of wives—"I broke about three dozen earthen pots—all of them new."

His home-made furnaces had failed, and potters' furnaces had failed, because they were not hot enough. The next step was to try the furnaces used by glass-workers, resuming his old method of experiment, now that he could again buy earthenware to break and chemicals to burn. "Seeing," Bernard says, "that I had been able to do nothing, whether in my own furnaces, or in those of the before-mentioned potters, I broke about three dozen earthen pots, all of them new ; and having ground a large quantity of different materials, I covered all the bits of

the said pots with my chemicals, laid on with a brush ; but you should understand that in two or three hundred of those pieces there were only three covered with each kind of compound. Having done this, I took all those pieces and carried them to a glass-house, in order to see whether my chemicals and compounds might not prove good when tried in a glass-furnace." By covering three separate fragments with each compound that he thought likely to melt into a white enamel, Palissy hoped that—these being in different positions in the furnace, and subject to such variations as there might be in the heat—he was securing to himself a fair chance of success with one fragment in every three. But at the same time, groping as he was in the dark, he knew that there was little promise of a satisfactory result unless he felt his way abundantly, submitting to the test about a hundred guesses at a time. One of the hundred, he might reasonably hope, would direct him on the road to what he sought. Up to this point his experiments had failed in the first necessary stage of getting his drugs properly melted ; but the glass-furnace, on which Bernard now depended for assistance, cheered him on immediately with a ray of hope. He had sent his first batch of trial-pieces to the glass-house. "Then," he tells us, "since these furnaces are much hotter than those of potters, the next day, when I had them drawn out, I observed that some of my compounds had begun to melt ; and for this cause I was still more encouraged to search for the white enamel, upon which I had spent so much labour."

No more encouragement was needed. "This little symptom, which I then perceived," says Palissy, "caused me to work for the discovery of the said white enamel for two years beyond the time already mentioned, during which two years I did nothing but go and come between my house and the adjacent glass-houses, aiming to succeed in my intentions"—two years of zealous labour without visible result ; two years of idleness, as the world reckons industry ; for Palissy, labouring rarely in his former calling, consumed the profits of his labour on the marshes, and saw his home falling again into decay. Still children were being born to him, and one or two he had seen buried. Yet through anxiety and mourning he worked on, upon no higher encouragement than the discovery that he

could now sometimes get his chemicals to melt. So during two years he bought pots and broke them, he bought drugs and burnt them, and did nothing but go and come between his own house and the adjacent glass-houses. To force a path into the unknown is toilsome labour; but when the intellect is active with an innate sense of strength, it feels in its own way as a man feels who is vigorous in muscle, and prefers a tour on foot among the mountains to a morning's ride in the old family coach.

But Palissy was poor. He had a wife and children for whose well-being he had made himself responsible. His domestic argument was of an obvious character:—Dear wife, I vex you now; but you know well that glass-painting is little patronised, and that our living would be scanty to the last if I adhered to my old callings. Stand by me now through a year or two of poverty; let us submit to privation, and get through the dark days as we can; for when I have discovered the enamel, as I surely shall if I still persevere in seeking for it, you can be the best-dressed woman in the town of Saintes, and we can put our sons into good trades or into farms, and we can give dowries to our daughters. With such arguments the wife's ear could be satisfied for a few months; but when the months multiplied and grew to years, and still the present facts were poverty and hope; when Bernard's hope was daily made to appear inconsistent with his daily crosses, how could her satisfaction last? Bernard had a sanguine temperament, which was not to be trusted, modern wives would say; and it would be their duty to fight against it, and, if possible, to check him on the road to ruin. Thoughts of this kind clouded about the temper of the wife of Palissy. She could not understand the energy of will which converts hope into foreknowledge, and the bold instinct of power which hangs that hope so high above the common estimate of human reach, in the true man of genius.

During two years, then, after the discovery that he could sometimes get his chemicals to melt when they were put into a glass-furnace, he pursued his experiments without success, and equally without fatigue. And then again, the urgent cares of home bade him desist. He determined, therefore, to send one last batch of trial-pieces to the furnace, and if that should, as usual, lead to no good

practical result, he would pause while he devoted himself wholly to his early trades, and to the present small, rather than the future great well-being of his family. But since this trial was to be his last, he was resolved that he would not give up his search easily, but close with an unusual effort. He broke more pots than ever, purchased a still greater variety of drugs and chemicals, and made no less than three hundred different mixtures, each of which might possibly contain the substances used in the covering of the enamelled cup. Having placed these, each on its own piece of broken pottery, duly marked and registered, he walked beside the man who carried them to the glass-furnace. He had no longer courage to support the sight of that domestic poverty which his experiments had caused ; yet it was grievous to give up the struggle—not the less grievous because it had cost so much—before he had justified his efforts by success. The trial-pieces were all put into the furnace ; and by the furnace-mouth sat Palissy, determined to watch through all stages the success of this, his last attempt.

On such moments in a life the mind dwells as upon the recollection of a picture. We see the glow of the furnace, through the two mouths by which it is fed, upon the walls of the surrounding hovel. We have a glimpse of some rich foliage, with broken bits of sunbeam scattered over it, as a glass-worker enters by the hovel-door, bringing in billets from the wood to feed the fire. Three or four men of Saintonge are occupied about the place, rough, coarsely-featured men, whose flesh is in strong contrast with the spirit that looks out of the face of Bernard, anxious and very still. Bernard Palissy, a man in the full strength of life, aged about thirty-seven, with a vigorous frame, paled and thinned by care, sits on a heap of fagots, sometimes laughing with the men, to cover his anxiety, at other times reverting with a fixed gaze to the furnace mouth. During four hours he has waited there. The furnace is opened, and his whole form is shining with a bright glow from the molten glass, as his eyes run over his regiment of potshards. The material on one of them is melted, and that piece being taken out, is set aside to cool. The furnace is closed, and Palissy has now to watch the cooling of that compound which had been so quickly melted ; not with great hope at first, but as it hardens—it grows white !

All that was black in the thoughts of Palissy begins to whiten with it. It is cold. It is "white and polished;"—a white enamel, "singularly beautiful."

A crowd of cares were nesting in the mind of Palissy when he went with his trial-pieces to the furnace; they all fly away—perhaps like pigeons, only to settle again—at any rate, they fly away, and Palissy goes back to his poor home over the meadows, carrying the white enamel potshard in his hand, to tell good tidings to his wife, and bid her share his triumph as she had shared too often his defeats. In what way he told the story to his wife we do not know; to us he tells it thus: "God willed that when I had begun to lose my courage, and was gone for the last time to a glass-furnace, having a man with me carrying more than three hundred kinds of trial-pieces, there was one among those pieces which was melted within four hours after it had been placed in the furnace, which trial turned out white and polished, in a way that caused me such joy as made me think I was become a new creature."

This took place in the year 1546, Palissy then being, as I before said, about thirty-seven years old. "I thought," he says, "that from that time I had the full perfection of the white enamel, but I was very far from having what I thought. This trial was a very happy one in one sense, but very unhappy in another: happy, because it gave me entrance upon the ground which I have since gained; but unhappy, because it was not made with substances in the right measure or proportion."

His wife found reason to consider it unhappy in another sense. The pressure of extreme poverty had forced him to resolve that he would confine his investigations to one other trial. The success of that trial urged him onward, set aside his design to return to his old business, encouraged him (and perhaps, in the first instance, his wife also) to increased endurance, while he laboured with more zeal than ever—for he sought now to turn the knowledge earned with so much pain, to practical advantage. He still had all to learn; experience had yet to teach him that his past labours were light, compared with the difficulties which were yet to be surmounted before he should have learnt to rival the enamelled cups of Italy.

Henceforth his work was to be private, and he was to

produce very soon, he believed, illustrious results. A furnace like that of the glass-workers sufficed, as it was proved, for the melting of his enamel. He must have such a furnace in his house, or rather in a shed appended to his house, which at that time certainly was situated in the suburbs of the town. But they were miserably poor. Bernard having found means to obtain bricks, perhaps upon the credit of his future earnings, could not afford to hire a cart for their delivery on his premises; he was compelled to journey to the brick-field, and to bring them home on his own back. He could pay no man for the building of the furnace; he collected the materials for his mortar, drawing for himself the water at the well; he was bricklayer's boy and mason to himself; and so with incessant toil he built his furnace, having reason to be familiar with all its bricks. The furnace having been at length constructed, the cups that were to be enamelled were immediately ready. Between the discovery of the white enamel and the commencement of the furnace there had elapsed a period of seven or eight months, which he had occupied in experiments upon clay, and in the elaborate shaping of clay vessels that were to be in due time baked and enamelled, and thereafter, on the surface of the enamel, elegantly painted. The preliminary baking of these vessels in the furnace was quite prosperous.

Then the successful mixture for the white enamel had to be tried on a large scale—such a mixture as that which Luca della Robbia had found “after experiments innumerable.” Its proportions we do not know; but the materials used include, Palissy tells us, preparations of tin, lead, iron, antimony, manganese, and copper, each of which must exist in a fixed proportion. The materials for his enamel, Palissy had now to grind, and this work occupied him longer than a month without remission, beginning the days very early, ending them very late. Poverty pressed him to be quick; intellectual anxiety to witness a result was not less instant in compelling him to labour. The labour of the grinding did not consist only in the reduction of each ingredient to the finest powder. When ground they were to be weighed and put together in the just proportions, and then, by a fresh series of poundings and grindings, they were to be very accurately mixed. The mixture was made, the vessels were coated with it.

To heat the furnace was the next task ; it had to be far hotter than it was when it had baked his clays—as hot, if possible, as the never-extinguished fires used by the glass-workers. But Bernard's fire had been extinct during the days of grinding ; poverty could not spare a month's apparent waste of fuel.

Bernard lighted then his furnace-fire, by two mouths, as he had seen to be the custom at the glass-houses. He put his vessels in, that the enamel might melt over them. He did not spare his wood. If his composition really did melt—if it did run over his vessels in a coat of that same white and singularly beautiful enamel which he had brought home in triumph from the glass-house—then there would be no more disappointments, no more hungry looks to fear ; the prize would then be won. Palissy did not spare his wood ; he diligently fed his fire all day, he diligently fed his fire all night. The enamel did not melt. The sun broke in upon his labour, his children brought him portions of the scanty household meals, the scantiness impelled him to heap on more wood, the sun set, and through the dark night, by the blaze and crackle of the furnace, Palissy worked on. The enamel did not melt. Another day broke over him ; pale, haggard, half-stripped, bathed in perspiration, he still fed the furnace-fire, but the enamel had not melted. For the third night his wife went to bed alone, with terrible misgivings. A fourth day and a fourth night, and a fifth and sixth—six days and nights were spent about the glowing furnace, each day more desperately indefatigable in its labour than the last ; but the enamel had not melted.

It had not melted ; that did not imply that it was not the white enamel. A little more of the flux used to aid the melting of a metal, might have made the difference, thought Palissy. "Although," he says, "quite stupified with labour, I counselled to myself that in my enamel there might be too little of the substance which should make the others melt ; and seeing this—" What then ? not "I regretted greatly the omission ;" but, "I began, once more, to pound and grind the before-named materials, all the time without letting my furnace cool ; in this way I had double labour, to pound, grind, and maintain the fire." He could hire no man to feed the fire while he was sleeping, and so, after six days and nights of unremitting

toil, which had succeeded to a month of severe labour, for two or three weeks more Palissy still devoted himself to the all-important task. The labour of years might be now crowned with success, if he could persevere. Stupified, therefore, with a labour under which many a weaker body would have yielded, though the spirit had maintained its unconquerable temper, Palissy did not hesitate, without an hour's delay, to begin his entire work afresh. Sleeping by minutes at a time, that he might not allow the supply to fail of fresh wood heaped into the furnace, Palissy ground and pounded, and corrected what he thought was his mistake in the proportions of the flux. There was great hope in the next trial; for the furnace, having been so long alight, would be much hotter than it was before, while at the same time the enamel would be in itself more prompt to melt. All his own vessels having been spoiled—the result of seven months' labour in the moulding—Palissy went out into the town, when his fresh enamel was made ready, and purchased pots on which to make proof of the corrected compound.

For more than three weeks Palissy had been imprisoned in the outhouse with his furnace, haggard, weary, unsuccessful, but not conquered yet, his position really justifying hope. But the vessels which his wife had seen him spend seven months in making lay before her spoilt; the enamel had not melted: appearances were wholly against hope to her as an observer from without. Bernard had borrowed money for his last experiments; they were worse than moneyless, they were in debt. The wood was going, the hope of food was almost gone. Bernard was working at the furnace, desperately pouring in fresh wood; his wife sat in the house, overwhelmed with despair. Could it lessen her despair that there was no result when all the stock of wood was gone, and wanting money to buy more, she vainly strove to hinder Palissy from tearing up the palings of their garden, that he might go on with a work which had already ruined them?

Bernard knew well how much depended on his perseverance then. There was distinct and fair hope that the melting of his present mixture would produce enamelled vessels. If it should do this, he was safe. Though in themselves, since he now had mere jugs and pipkins to enamel, they might not repay his labour, yet it sufficed

that they would prove his case, justify all his zeal before the world, and make it clear to all men that he had a secret which would earn for him an ample livelihood. Upon the credit of his great discovery, from that day forward he could easily sustain his family, until he should have time to produce its next results. The furnace, at a large expense of fuel, was then fully heated ; his new vessels had been long subjected to its fire ; in ten minutes—twenty minutes—the enamel might melt. If it required a longer time, still it was certain that a billet in that hour was of more value than a stack of wood could be after the furnace had grown cold again.

So Bernard felt ; but any words of his to his wife's ear, would only sound like the old phrases of fruitless hope. The labour and the money perilled for the last nine months, were represented by the spoiled vessels in the outhouse ; they were utterly lost. The palings were burnt in vain ; the enamel had not melted. There was a crashing in the house ; the children were in dismay ; the wife, assisted doubtless by such female friends as had dropped in to comfort her, now became loud in her reproach. Bernard was breaking up the tables, and carrying them off, legs and bodies, to the all-consuming fire. Still the enamel did not melt. There was more crashing and hammering in the house ; Palissy was tearing up the floors, to use the planks as firewood. Frantic with despair, the wife rushed out into the town ; and the household of Palissy traversed the town of Saintes, making loud publication of the scandal.

Very touchingly does Palissy himself relate the position to which he had now been brought. "Having," he says, "covered the new pieces with the said enamel, I put them into the furnace, keeping the fire still at its height ; but thereupon occurred to me a new misfortune which caused great mortification, namely, that the wood having failed me, I was forced to burn the palings which maintained the boundaries of my garden ; which being burnt also, I was forced to burn the tables and the flooring of my house, to cause the melting of the second composition. I suffered an anguish that I cannot speak, for I was quite exhausted and dried up by the heat of the furnace ; it was more than a month since my shirt had been dry upon me. Further to console me, I was the object of mockery ; and even

those from whom solace was due ran crying through the town that I was burning my floors ! And in this way my credit was taken from me, and I was regarded as a madman.

“ Others said that I was labouring to make false money, which was a scandal under which I pined away, and slipped with bowed head through the streets like a man put to shame. I was in debt in several places, and had two children at nurse, unable to pay the nurses ; no one gave me consolation, but, on the contrary, men jested at me, saying, ‘ It was right for him to die of hunger, seeing that he had left off following his trade.’ All these things assailed my ears when I passed through the street ; but for all that there still remained some hope which encouraged and sustained me, inasmuch as the last trials had turned out tolerably well ; and thereafter I thought that I knew enough to get my own living, although I was far enough from that (as you shall hear afterwards).

“ When I had dwelt with my regrets a little, because there was no one who had pity upon me, I said to my soul, ‘ Wherefore art thou saddened, since thou hast found the object of thy search ? Labour now, and the defamers will live to be ashamed.’ But my spirit said again, ‘ You have no means wherewith to continue this affair ; how will you feed your family, and buy whatever things are requisite to pass over the four or five months which must elapse before you can enjoy the produce of your labour ?’ ”

CHAPTER VI.

A HERETIC IS BURNT AT SAINTES—NEW TROUBLES AFFLICT BERNARD PALISSY.

WE have now arrived at the beginning of the year 1547. The greater part of the year 1546 had been employed by Palissy, as we have seen, in the examination of clays and the modelling of those vessels upon which he was to make the first trial of his white enamel. But although Bernard bestowed upon such labour enough energy to justify us in assuming that it was the sole thought of his mind, we shall err greatly if we content ourselves with any such assumption. In the month of August, 1546, not long before they were taught to regard Palissy as a madman, the people of Saintes had been enlightened by the fire in which a heretic was burnt alive. It was "the brother at Gimosac, who kept a school, and preached on Sunday, being much beloved by the inhabitants."

This was nearly the beginning of the horrors perpetrated in Saintonge for the benefit of Christianity. From the beginning, Palissy paid to such events eager attention, and he was soon led to throw the whole force of his energy upon the side of the Reformers. The persecutions were not new to France, though new to Saintonge, in the year 1546; they must have been familiar to Palissy, as we have seen, during his years of wandering. Every year had supplied its list of martyrs. Beyond the limits of Saintonge, in that year 1546, there had been destroyed Pierre le Clerc, Etienne Mangin, Michel Caillon, Jaques Bouchebec, Jean Brisebarre, Henri Hutinot, François le Clerc, Thomas Honoré, Jean Baudouin, Jean Flèche, Jean Pigncri, Jean Matclon, and Philippes Petit. Also a peasant who, in the forest of Lyori, questioned prisoners upon the way to execution, and having learned the reason of their sentence, claimed a place upon the cart, and went

to execution with them. "In this year," says a contemporary historian, "France began to redouble persecution by the death of Pierre Chappot, executed at Paris with five others, of which the names have escaped; Etienne Pouliot burned with Bibles, and a François d'Angi, at Nonnay, in Vivarets."

The interest taken by Palissy in the religious struggles of his time was manifested in his life and writings not less vividly than his strong interest as a philosopher in nature, or his almost unexampled patience in the prosecution of researches as an artisan. In one of his treatises there is contained a "History of the Troubles of Saintonge," in which he relates much that he himself saw and knew of the events connected with the religious history of Saintes. The events which occurred in the year 1546 left a deep impression on the mind of Palissy, and are related by him, many years afterwards, from memory, in great detail. It becomes necessary, therefore, that we interrupt the story of his struggle to produce enamelled vases, while we dwell upon some other facts on which the mind of Palissy was also at the same time dwelling.

Historians will recognise the philosophic motive which induced Palissy to interpolate among his works a history of his experiences in Saintonge. Their labour would be light if all men who have power had the will to act on Palissy's suggestion. "I should think it well," he says, "that in each town there should be persons deputed to write faithfully the deeds that have been done during these troubles; and from such materials the truth might be reduced into a volume." For this cause, Palissy informs us, he has written his short narrative. "You must understand," he continues, "that just as the Primitive Church was built upon a very small beginning, and with many perils, dangers, and great tribulations, so, in these last days, the difficulty and dangers, pains, labour, and afflictions, have been great in this region of Xaintonge—I say of Xaintonge, because I will leave the inhabitants of any other diocese to write of it themselves that which they truly know." This preface is the language of a naturalist who has acquired a close habit of observation, and who understands how many small experiences must be put together for the forming with anything like accuracy of one great general conclusion.

Palissy begins his narrative in the year 1546, when, "Certain monks, having spent some days in parts of Germany, or, it may be, having read some books of their doctrine, and finding themselves deceived, they had the boldness, secretly enough, to disclose certain abuses; but as soon as the priests and holders of benefices understood that these people depreciated their trade, they incited the judges to descend upon them; this the judges did with an exceedingly good will, because several of them possessed some morsel of benefice which helped to boil the pot. By this means, some of the said monks were constrained to take flight, to exile, and unfrock themselves, fearing lest they might die in too hot a bed. Some took to a trade, others kept village schools; and because the isles of Olleron, of Marepnes, and of Allevvert, are remote from the public roads, a certain number of the said monks withdrew into those islands, having found sundry means of living without being known."

We have already seen that many heretics, and among them Calvin himself, had fled for refuge to Saintonge before the year 1546. When Palissy assigns that date to the commencement of his tale, he does so, probably, from two reasons, one very much dependent on the other. The first reason is, that in the year 1546 persecution was redoubled, and the number of refugees would consequently be multiplied; the second reason is, that the increased number of refugees, and their exemplary way of life, probably in that year arrested more strongly than usual Palissy's attention. Babinot and Véron, since Calvin's departure, had been working in the district, and had raised up friends to the new doctrine. To them came the monks or preachers who had abandoned their benefices with their superstitions, and took refuge from persecution in the islands of the coast of Saintonge, where many men, and even monks of the abbeys of Saintes, St. Jean d'Angely, and Bassac, adopted their opinions. If Palissy had, before this time, only advanced to a state of vague dissent from the inconsistencies and worldly dealings of the orthodox Church, it is, at the very latest, to the year 1546 that we must assign his own distinct enrolment in the body of Reformers. If this be so, the reference may be considered personal, as well as general, in the succeeding portion of the statement concerning the

Reformed monks of Oléron, Marennnes, and Allevard : "And as they visited the people, they ventured to speak only with hidden meaning, until they were well assured that they were not to be betrayed. And after that, by this means, they had reformed some numbers of persons, they found means to obtain the pulpit, because in those days there was a grand-vicar who tacitly favoured them ; thence it followed that by little and little, in these districts and islands of Xaintonge, many had their eyes opened, and knew many errors of which they had before been ignorant ; for which cause many held in great estimation the said preachers, inasmuch as but for them they would view their errors poorly enough."

The favour of the grand-vicar, by which the Reformers of Saintonge were encouraged, was not a matter of unusual good fortune. The secret growth of the Reformed doctrines had been most decided among educated or intellectual men ; and for this reason we are told that there was scarcely a set of officials in the country which did not include one or two men willing to assist Reformers.

The Bishop of Saintes did not, of course, often reside at Saintes ; Saintes was no more to him than one bone in his mess of potage. His fit place was at court, for he was no less magnificent a person than Charles, Cardinal of Bourbon, an august personage, then twenty-three years old, "descended from the precious blood of Monseigneur St. Louis." But "there was in those days," says Palissy, "a man named Collardeau, a fiscal attorney, a man perverse and of evil life, who found means to give notice to the Bishop of Xaintes, who was at the time at court, giving him to understand that the place was full of Lutherans, and that he gave him charge and commission to extirpate them." This busy person wrote more than one letter, and crowned his energetic efforts with a trip to Paris, for the express purpose of speaking to the great man. "He succeeded so well by these means, that he obtained a commission from the bishop and from the Parliament of Bourdeaux"—within whose jurisdiction I have already said that the diocese of Saintonge is included—"with a good sum of deniers that were taxed to him by the said court. This he contrived for gain, and not through zeal on behalf of religion."

The natural inclination of educated men towards the

Reformers was, throughout these troubles, held constantly in check by appeals from within or from without to their self-interest. Income, dependent on some benefice, restrained the larger number from all active sympathy. Collardeau, in the present instance, "tampered with certain judges, as well in the island of Olleron as of Allevert, and likewise at Gimosac ; and having corrupted these judges he caused the arrest of the preacher of St. Denis, which is at the end of the island of Olleron, named Brother Robin, and by the same means caused him to be passed into the island of Allevert, where he arrested another preacher named Nicole ; and some days afterwards, he took also the brother of Gimosac, who kept a school and preached on Sundays, being much beloved of the inhabitants. And although," says Palissy, "I believe the story to be written in the Book of Martyrs, yet, nevertheless, because I know the truth of certain facts, I have found it well to write them, namely, that they well disputed and maintained their religion in the presence of one Navières, theologian, canon of Xaintes, who had himself formerly begun to detect errors, however much—because he had been conquered by his belly—he maintained the contrary." Of this they took care, of course, duly to remind him. However the right may stand, it rarely happens in a contest that the scolding is monopolised by either party. "However that might be, these poor folks were condemned to be degraded and caparisoned in green, in order that the people might esteem them fools or madmen ; and what is more, because they maintained manfully the cause of God, they were bridled like horses by the said Collardeau, before being led upon the scaffold, which bridles had to each an apple of iron which filled all the inside of the mouth—a very hideous thing to see." Hideous indeed ! This, then, was one sight which amused the town of Saintes, and largely occupied the thoughts of Palissy while his fingers laboured in the moulding of those earthen vessels which were afterwards destroyed in his first effort at enamelling. His clay was then within a few months of destruction, but those pieces of God's clay—Brother Robin and his friends—were to be broken sooner. "Being thus degraded, they restored them into prison to conduct them to Bourdeaux, in order that they might be condemned to death."

Palissy soon found more subject for discourse and cogitation in connection with these ministers. Brother Robin was the best of them ; that is to say, the most active ; and him, accordingly, "it was designed to put to death with the utmost cruelty." Brother Robin was a tit-bit to be guarded carefully. He was kept with his companions, heavily ironed, in a prison attached to the bishop's palace. A sentry was put outside their cell, to listen for all sounds that indicated efforts to escape ; and a by no means friendly grand-vicar had contributed a number of large village dogs, "which were set at large in the bishop's court, in order that they might bark if any prisoner attempted to come out." All the precautions were so thoroughly complete, that the watchman saw no reason why he should not go to sleep during the orthodox hours appointed for that purpose. He was not a heretic, and so he went to sleep.

The heretical monk, Brother Robin, preternaturally wakeful, had found means to keep or get possession of a file. He had already filed his chains asunder, and was scraping a hole by which his body might pass through the prison-wall, selecting for his purpose an unreasonable hour, consistent with his usual perversity. It is obvious that no Christian watchman of regular habits could have anticipated so indecent a proceeding.

Brother Robin had contrived to remove a good number of stones out of his prison-wall, and would have got to the free air, if a bishop's household had been something less familiar with good liquors. The cheerful service done by all retainers in their master's absence was attested by a pile of empty hogsheads in the court, heaped up against the prison-wall ; and Brother Robin tapped his wall, unluckily, into the barricade of them. How many were there piled he could not tell ; his obvious duty was to give a lusty push, and so he did, and down they came, making, as empty hogsheads will, a heavy drumming.

The reveillé thus beaten roused the watchman, who came out into the night to listen. Brother Robin was too wise to make a noise. The watchman heard that there was nothing to hear, though there had been a noise—one of those unaccountable noises made by that unaccountable tumbling-down of things which will occasionally startle all of us at night. The watchman went in to end

his nap, and Brother Robin came out, if possible, to finish his adventure. "And so the said Brother Robin went out into the court, at the mercy of the dogs."

But Brother Robin, by much barking, had long been made aware that he should have dogs to contend with. He had stored up for them a supper from his bread. It is the nature of dogs, as of most other creatures who dance about the doors of great men, to be always hungry. A dog in the year 1546 would scarcely have been able to rank as the companion of man in France if he had not had a tender corner in his belly, by the soothing of which he could be managed easily. Brother Robin filled the mouths of his antagonists with sturdy lumps of bread, and neither man nor dog will care to bark while he has anything to swallow.

So Brother Robin had his own way for a little time. "Now you must know"—I drop again into the quaint, terse narrative of Palissy—"now you must know that the said Robin had never been in this town of Naintes; for this cause, being in the bishop's court, he was still shut up; but God willed that he should find an open door which led into the garden, which he entered; and finding himself again shut up between certain somewhat high walls, he perceived by the light of the moon, a certain pear-tree which was close enough to the said wall, and having mounted the said pear-tree, he perceived, on the other side of the said wall, a chimney, to which he could leap easily enough. Seeing which, he went back to the prison, to know whether any one of his companions had filed his irons." He had given them his own file, and if they had chosen to risk the adventure with him, there would have been time enough to cut an iron chain or two while Brother Robin was boring through the wall. Probably, however, they esteemed it honourable to await their martyrdom. Brother Robin, though he would not have tampered with his soul, was ready to deny his body to the executioner, if he could carry it by skill into a place of safety; therefore, finding his companions with their chains whole, "he consoled and exhorted them to battle manfully, and to take patiently their death; and embracing them, took leave of them, and went again to mount upon the pear-tree, and thence leapt upon the chimneys of the street."

The bishop's wall was only "somewhat high," and as Brother Robin leapt down from it upon the chimneys of the street, the houses in that part of Saintes must have been somewhat low. To find a way down, therefore, from the chimneys to the road was not a difficult proceeding.

The escaped heretic, outside the bishop's walls, traversing on a moonlight night the streets of Saintes, was treading upon unknown ground. He might find his way to the outskirts, but what would the town guards say to a man stealing out into the country at midnight, with a strange face and no very clear account to give of his proceedings? Every house contained a stranger, and almost every house an enemy; but since it was absolutely necessary to find shelter somewhere, and while wandering about the street to have some ostensible purpose for so doing, Brother Robin began, in a most reckless manner, to disturb the slumbers of the orthodox.

Though he did not know of any friend in Saintes, it so happened that during his imprisonment the clever monk had been attacked with pleurisy, and been attended during illness by a physician and apothecary. The names of these people he remembered. Accordingly, the wily fellow tucked his dress about his shoulders in such fashion, that under the moonlight it resembled the costume of a footman; to increase the resemblance, he fastened his fetters to his thigh, and then, with that violent haste which suited his own purpose, and appeared very well to suit the purpose of a messenger from some family afflicted with a sudden illness, he proceeded to knock up the people of Saintonge, "inquiring for the said physician and apothecary, of whom he had remembered the names. But in doing this, he went to knock at several doors belonging to his greatest enemies, and among others at the door of a counsellor who employed all diligence next morning to get news of him, and promised fifty dollars on the part of the grand-vicar, named Sellère, to him by whose means the said Robin should be taken."

Brother Robin, however, had met with the success he deserved; he had found "refuge in a house, and was from thence, in the same hour, conducted out of the town." Probably the physician or apothecary had an educated sympathy with the Reformers, and answered the trust placed in his generosity by Brother Robin, trotting out

with him in his disguise of footman, as with a person by whom he had been summoned to an urgent case. Subsequent suspicion never would be fastened on so commonplace an incident. This escape of Brother Robin, in August, 1546, was an event over which Palissy no doubt rejoiced abundantly; he styles it "an admirable accident." The companions who remained in prison, and made no endeavour to escape, were burnt during the same month; "one in the town of Xaintes, and the other at Libourne, because the Parliament of Bourdeaux had fled thither by reason of the plague, which was then in the town of Bourdeaux." This incidental mention of a Parliament ejected by the plague, reminds us duly of another feature in the sixteenth century. Bodies were plagued nearly as much as souls.

Purses were also plagued, those which were naturally slender in their constitution being always first to suffer. It was at this time, Palissy tells us, that "the bishop, or his counsellors, resolved upon a trick and stratagem extremely subtle; for having obtained some order from the king, for the cutting down of a great number of forests which were around this town, nevertheless, because many found their recreation in the woods and pastures of the said forests, they would not permit that they should be levelled; but those, following the Mahometan artifices, resolved to gain the heart of the people by preachings, and presents made to the king's party; and sent into this town of Xaintes, and other towns of the diocese, certain monks of the Sorbonne, who foamed, slavered, twisted and twirled themselves, making strange gestures and grimaces, and all their discourses were nothing but outcry against these new Christians; and sometimes they exalted their bishop, saying that he was descended from the precious blood of Monseigneur St. Louis; and in this way the poor people patiently allowed their woods to be cut down; and the woods having been thus cut, there were no more preachers. Thus you see how the possessions of people were practised upon, as well as their souls."

While we speak now of the cutting of the forests round Saintonge, which took place during this portion of the life of Palissy, it becomes fit that we should regard Palissy as lover of the woods and fields, and understand the

spirit in which he regarded this wholesale destruction. The avarice which prompted holders of the benefices to attack the forests in almost all provinces of France, has been illustrated in a previous chapter. It concerns us only now to know how Palissy was accustomed to think, speak, and write about such things. It has to be remembered that in those days wood was synonymous with fuel, and France depended upon forests for that necessary part of civilised existence. After recounting with the fresh breath of a naturalist many of the delights of nature, Palissy says: "All these things have made me such a lover of the fields, that it seems to me that there are no treasures in the world so precious, or which ought to be held in such great esteem, as the little branches of trees and plants, although they are the most despised. I hold them in more esteem than mines of gold and silver. And when I consider the value of the very smallest branch of tree or thorn, I am filled with wonder at the great ignorance of men, who seem, in our day, to study only how to break through, cut down, and destroy the beautiful forests which their predecessors had been guarding as so precious. I should not find it wrong in them to cut the forests down, if afterwards they planted any portion of the soil; but they think not at all of times to come, not considering the great harm they are doing to their children in the future.

Question.—And why do you find it so wrong that forests should be cut down in this manner? There are many bishops, cardinals, priories and abbeys, monasteries and chapters, which, in cutting forests down, have obtained treble profit. First, they have had money for the wood, and have given some of it to women, children, and men also. *Item.*—They have leased the soil of the said forests at a rental, out of which they have reaped much money also in entrance-fees. And afterwards, the labourers have sown wheat and seeds every year, of which wheat they have had always a good portion. You see, therefore, how much more income lands yield than formerly they yielded. For which reason I cannot think that this ought to be found wrong.

Answer.—I cannot enough detest such a thing, and can call it not a fault, but a curse and a misfortune to all France; because, when all the woods shall have been

levelled, there must be an end of all the arts, and artisans may go and browse on herb like Nebuchadnezzar. I have sometimes attempted to put down in order the arts that would cease, if there came to be an end of wood ; but when I had written a great number of them. I could see no way to an end of my writing ; and having considered all, I found that there was not a single one to be exercised without wood : that all navigation and all fisheries must cease ; and that even the birds, and several kinds of beasts, which nourish themselves upon fruits, must migrate to another kingdom, and that neither oxen, cows, nor any other bovine animals would be of service in a country where there was no wood. I had studied to give you a thousand reasons ; but this is a philosophy which, when the outside waiters shall have thought about it, they will judge that without wood it is impossible to exercise any art ; and it would even be necessary, if we had no wood, for the office of the teeth to become vacant, and where there is no wood, there is no need of wheat, nor any other kind of grain for making bread.

“ I think it a very strange thing that many seigneurs do not compel their subjects to sow some part of their land with acorns, and other parts with chesnuts, and other parts with filberts, which would be a public good, and a revenue that would grow while they were sleeping. That would be very fit in many parts where they are constrained to amass the excrement of oxen and cows, to warm themselves ; and in other regions they are obliged to warm themselves and boil their pots with straw ; is not this a fault and public ignorance ? If I were seigneur of such lands so barren of wood, I would compel my tenants to sow trees in at least a part of them. They are much to be pitied ; it is a revenue which would come to them while sleeping ; and after they had eaten the fruits of the trees, they could be warmed by their branches and their trunks.”

Long afterwards, France really had become so much denuded of its forests, that advice like that of Palissy for the encouragement of plantations had to be promulgated by enactments. Upon this, however, it is not our province to dwell. Before we return to a relation of the struggles made by Palissy upon the track of the enamelled cup, we will add one more illustration of his breadth of

mind, by following the clear-sighted philosopher into the fields. There we shall see him fretted by a state of things which has continued over a large part of Europe ever since his time, and throwing out suggestions which even in England at the present day stand in the front rank among thoughts connected with the future progress of humanity. How few must there have been to sympathise with this clear sense among the errors and confusions of society three centuries ago. In days when ignorance made much pretension, how inattentive would ears be to the philosophy of a poor potter, without Latin and Greek, who spoke clear thoughts in his own clear, delightful way, but in a way so homely and so unassuming, that even among the big words of the nineteenth century we almost need to reassure each other that it is true philosophy, high manly thought, which has been written with so modest and so touching a simplicity.

Palissy was struggling against difficulty, and regarded with contempt by his own townsmen, with just doubts about his "common sense" by his own wife. If his sense had indeed been common, let the world judge whether France might not have been some degrees more happy. Palissy looked about, with his habitually shrewd attention, in the fields.

"Many," he says, "devour their income as retainers of the court in hectorings, superfluous expenses, as well in accoutrements as in other things; it would be much more useful for them to eat onions with their tenants, and teach them how to live well, set them good example, adjust their disputes, hinder them from ruining themselves with lawsuits, plant, build, trench, feed, sustain, and, at the requisite and necessary time, hold themselves ready to do service to their prince for the defending of their country.

"I wonder at the ignorance of men, when I look at the agricultural implements, which ought to be in more request than precious bits of armour; yet for all that, it seems to certain striplings, that if they had handled any implement of agriculture, they would have been dishonoured by it; and a gentleman, however poor he may be, and up to his ears in debt, would be debased in his own eyes if his hands had been for a short time in contact with a plough.

"I could wish that the king had founded certain offices,

estates, and honours, for all those who should invent some good and subtle agricultural tool." (Three centuries ago, the spirit of this suggestion was three centuries and a half in advance of the time when it was uttered.) "If it were so, everybody's mind would have been bent on achieving something. Ingenious men were never in demand at the siege of a town but there were found a few; and precisely as you see men despise the ancient modes of dress, they would despise also the ancient implements of agriculture, and in good sooth they would invent better ones.

"Armourers often change the fashion of the halberds, swords, and other harness; but the ignorance in agriculture is so great that it abides ever accustomed to one method; and if the tools were clumsy at their first invention, they preserve them ever in their clumsiness; in one province, one accustomed fashion without any change; in another province, another also without ever changing.

"It is not long since I was in the province of Bearn and of Bigorre; but in passing through the fields, I could not look at the labourers without chafing within myself, seeing the clumsiness of their implements; and why is it that we find no well-born youth who studies as much to invent tools useful to his labourers as he takes pains over the cutting of his coat into surprising patterns? I cannot contain myself to talk over these things, considering the folly and the ignorance of men."

"The cutting of his coat into surprising patterns" was a task which Palissy just now was spared the pains of undertaking for himself; poverty looked at his garments, and was hard at work for him on the hole-making part—in those days not a small part—of a tailor's duty. From this short wandering among the wealth of Bernard's mind, we must return now to the worldly wretchedness that he endured at home, and to his unrelaxed exertions in that labour which had yet to find success, and earn its fair requital from the world.

CHAPTER VII.

PALISSY BECOMES A POTTER.

BERNARD PALISSY, plunged in disaster, nevertheless had reason to be sure that he had discovered the profitable art of which he had been for the last six or seven years in search. High as his faith then was in himself, the faith of other men in him had never been so weak as at that most critical point in his whole struggle. His assault upon the floors and tables, reasonable and judicious as undoubtedly it was, had suffered judgment at the hands of all his neighbours. The result of that act, as it concerned himself, had been, that he had produced some melting of his enamel over the common household jars which he had purchased ; they were whitened. Family and friends might cry that he was mad, but he had gained the desired knowledge, and the difficulty now was, overwhelmed with poverty, to make a proper use of it. One question, too, he had to put to himself, as we have already seen, "How will you feed your family, and buy whatever things are requisite to pass over the four or five months which must elapse before you can enjoy the produce of your labour? Then," he says, "when I was thus seized with sorrow, and debating in my spirit, hope gave me a little courage." The man of genius who hopes and strives will never be defeated in his efforts to achieve whatever man can do.

Bernard believed firmly that the next batch he baked would begin, for him and his, the long-postponed repayment for their toil and suffering. Comparatively ignorant as he then was of clays, it had occupied him on the previous occasion seven months to mould his vessels. It would be braving death—and not indeed his own, but that of his children—to prolong so tediously the struggle while they all lay ground under the heel of want. Therefore,

he tells us, "more promptly to cause to appear the secret which I had discovered of the white enamel, I took a common potter and gave him certain drawings, in order that he might make vessels in accordance with my own designs; and whilst he made these things, I occupied myself over some medallions." These medallions, probably, were figures in relief of natural objects which he proposed to enamel and to paint; they may, however, have been copies of some of the Roman coins and curiosities which were continually being dug up in the town of Saintes, rich, as I have shown already, in antiquities. "But this," adds Bernard, "was a pitiable thing."

Indeed it was. Hope gave him courage to take a step which his wife must have pronounced rash, and over which she must have grieved abundantly. He was unable to feed his children with his own resources, he was falling into debt, and he engaged now an assistant in the labours which seemed destined to work out his ruin. The wages he engaged to pay the potter whom he hired, he expected confidently to draw out of his furnace; he could not maintain him in his house. His wife could not spare food enough; and if she had been able, would have given to the accomplice of her husband, both before and after meat, a grace that would not have assisted his digestion. It is curious that there could be found at that time an inn-keeper in Saintes—but such a man was found—who gave the potter all his meals, and lodged him for six months, putting the cost down to the account of Bernard Palissy. Bernard, however, had in him a purity of spirit which must have inspired many men with confidence in his integrity, who had but small faith in his judgment, and mutual good-will towards the new religion may have formed a bond between himself and the confiding publican.

They laboured for six months, during which time the potter worked from the designs supplied to him by Palissy. Then, when there was no more need of the potter's services, he had to be discharged, and of course waited for his wages. Bernard had an empty pocket, and well-nigh an empty house; there remained little to strip, except his person; so when the potter went, says Palissy, "for want of money, I was forced to give part of my clothes for wages."

Being left alone, he had to make an improved furnace. "Then," he tells us, "because I had not any materials for the erection of my furnace, I began to take down that which I had built after the manner of the glass-workers, in order to use the materials again. Then, because the said furnace had been so strongly heated for six days and nights, the mortar and the brick in it were liquefied and vitrified in such a manner, that in loosening the masonry, I had my fingers bruised and cut in so many places, that I was obliged to eat my potage with my fingers wrapped in rags.

"When I had pulled down the said furnace, it was requisite to build the other, which was not done without much difficulty ; since I had to fetch for myself the water, and the mortar, and the stone, without any aid and without any repose. This done, I submitted the before-named work to the first baking, and then, by borrowing, or in other ways, I found means to obtain materials for making the enamel for the covering of the said work, which turned out well from the first baking ; but when I had bought the said materials, there followed a labour for me which appeared to baffle all my wits ; for, after I had wearied myself through several days in pounding and calcining my chemicals, I had to grind them, without any aid, in a hand-mill which it usually required two strong men to turn ; the desire which I had to succeed in my enterprise made me do things which I should have esteemed impossible. When the said colours were ground, I covered all my vessels and medallions with the said enamel ; then, having put and arranged them all within the furnace, I began to make the fire, thinking to draw out of my furnace three or four hundred livres, and continued the said fire until I had some sign and hope of my enamels being melted, and of my furnace being in good order."

This time Palissy was right in all his calculations ; his furnace was so much improved, and his enamel so correctly mixed, that one day was sufficient for the melting. But a mischance had happened upon which he had not calculated, and thus he tells us that, "The next day, when I came to draw out my work, having previously removed the fire, my sorrows and distresses were so abundantly augmented that I lost all countenance."

The enamel was right, the furnace was right, but the

whole work was spoilt. The elaborate designs, the play of Bernard's fancy as an artist for six months ; the debt incurred for maintenance and wages of the potter, who had wrought his fancy out upon the clay ; the hands wounded with labour at the furnace ; the money begged and borrowed to buy chemicals ; the weeks of drudgery in grinding, the hope and self-denial of eight months ; all led to "sorrow and distresses so abundantly augmented." Yet the enamel was right, and the fire was effectual, and all Bernard's speculations had been perfectly fulfilled. Why, then, was all his labour lost ?

"It was because the mortar of which I had built my furnace had been full of flints, which, feeling the vehemence of the fire (at the same time that my enamels had begun to liquefy), burst into several pieces, making a variety of cracks and explosions within the said furnace. Then, because the splinters of the flint struck against my work, the enamel, which was already liquefied and converted into a glutinous matter, retained the said flints, and held them attached on all sides of my vessels and medallions, which, except for that, would have been beautiful." Palissy says but a few touching words about his grief : "Then I was more concerned than I can tell you, and not without cause, for my furnace cost me more than twenty-six gold dollars. I had borrowed the wood and the chemicals, and so had borrowed part of my hope of food in making the said work. I had held my creditors in hope that they would be paid out of the money which would proceed from the pieces made in the said furnace, which was the reason why several began to hasten to me after the morning when I was to commence the drawing of the batch."

Palissy had referred all things to this day, which was to have extricated him from his embarrassment and misery. The poor are always promise-breakers. The rich man, if one expectation fails, is able to fall back on his reserves. The poor man, when he is in debt, compelled to pay his expectations out as promises, has fifty broken promises charged at his door for every unforeseen mischance that baulks his foresight. Palissy could not have foreseen the misadventure which made the long-anticipated day of his deliverance the day of his descent into new depths of sorrow. He had expected three or four hundred livres. "I received," he says, "nothing but

shame and confusion ; for my pieces were all bestrewn with little morsels of flint, that were attached so firmly to each vessel, and so combined with the enamel, that when one passed the hand over it, the said flints cut like razors. And although the work was in this way lost, there were still some who would buy it at a mean price ; but, because that would have been a decrying and abasing of my honour, I broke in pieces the entire batch from the said furnace, and lay down in melancholy—not without cause, for I had no longer any means to feed my family. I had nothing but reproaches in the house ; in place of consolation, they gave me maledictions. My neighbours, who had heard of this affair, said that I was nothing but a fool, and that I might have had more than eight francs for the things that I had broken ; and all this talk was brought to mingle with my grief.”

“And all this talk was brought to mingle with my grief!” If one could sketch a scene like this with the pencil of a master, it would make a goodly picture. The dilapidated outhouse, its breaches rudely filled up with green boughs ; Palissy grand in his own grief, tattered in dress, with a litter of beautiful vases, cups, urns, and medallions, the products of his rich taste and fancy, broken at his feet ; the angry creditors ; the village gossips pouring their much talk over his bowed spirit ; his thin, pale children crouching, wondering, about ; his lean wife—God forgave her on the instant—pouring on him maledictions, ignorant or careless how his heart would open in that hour of anguish to receive one syllable of woman’s consolation.

Palissy retired into his chamber, and lay down upon his bed. He had done well to break his vessels. His skill as an artist, and his really discovered secret of the white enamel, placed before him a wide field for ambition. He meant to produce costly articles of luxury, and he could not afford, because the flints had speckled them, to hurt his future reputation by sending his rich creations into the world at the price of well-side pitchers. Princes were to be his paymasters. But he had no longer any means to feed his family. His wife could not forget that ; and he might have had more than eight francs for the things that he had broken.

If the wife could have seen and understood the spirit of

her husband, she would have followed his melancholy step when he withdrew to the recesses of his chamber.

Confusion, shame, melancholy, grief, Palissy connects with this event ; but he has never named the word despair. He retired from the discussions of his neighbours, missing painfully the consolation of his wife ; but he retired to have his own discussion in himself, to ascertain in peace what was his present duty. We have already seen enough of Bernard Palissy to know that he is not likely to bow his head and own that he is vanquished by the most imperious of difficulties. After experiencing this last severe rebuff, Palissy withdrew into his chamber ; and there, he says, "when I had remained some time upon the bed, and had considered within myself, that if a man should fall into a pit, his duty would be to endeavour to get out again"—a very simple rule, which all men have not strength enough to follow ; they often die while they are waiting to be pulled out—"I," Palissy adds, "being in like case, set myself to make some paintings, and in various ways I took pains to recover a little money."

That is to say, he tranquilly abandoned his experiments, while he devoted himself for a short time wholly to the repair of his household fortunes. People thought him a good painter, and as he had by no means glutted his market lately in that character, he probably found it not difficult to sell the sketches that he made. About their price he was not at all proud or particular. He drew from nature with minute accuracy, and was versed in the common details of a painter's art ; but his genius had dwelt upon the works of masters, and he thought, therefore, but little of his own. "People," he said, "thought him a better painter than he was."

Having paid just attention to these things, and with, perhaps, about a year's toil having revived some of the gloss on his establishment, and earned a little money in reserve, Palissy was at leisure to resume his enterprise. "I said within myself, that my losses and hazards were all past, and there was no longer anything to hinder me from making good pieces ; and I betook myself (as before) to labour in the same art."

The date at which this narrative now stands is the year 1549. A king of France died at about the time when Palissy was tearing up his floors, and Francis the First

has been succeeded by his son, Henry the Second. In the year 1549, Palissy was about forty years old, and his labour to invent enamelled ware had been spread over a period of some eight years. It cost him eight years more, but the worst portion of his toil was over. Palissy had now only to learn the temper of his clays, and buy with experience a knowledge of those numerous mishaps which practical potters only can appreciate, and against which, in those days of rude appliances, incessant watchfulness was needed. The mishaps, at first, were lamentably frequent. The very next batch of vessels with which Palissy endeavoured to redeem his credit, and for which he built another furnace, carefully eschewing flints, was lost as unexpectedly as its predecessor, "for there occurred an accident of which I had not thought; for the vehemence of the flame of fire had carried a quantity of ashes against my pieces; so that in those parts which had been touched by the ashes, my vessels were rough and ill-polished; because the enamel, being liquefied, had united with the said ashes. In spite of all these losses I remained in hope of remounting in fortune by the said art; for I caused to be made, by certain potters, a large number of earthen lanterns, to contain my vessels when I put them in the furnace, in order that, by means of the said lanterns, my vessels might be protected from the ash. The invention proved a good one, and has served me to the present day."

During the next two years Palissy prospered little; he made, indeed, vessels of different colours, which kept house tolerably, and enabled him to abide by his furnace, losing the greater part of his more ambitious work by various mischances; "as, when I had made a batch, it might prove too much baked, or another time too little, and all would be lost in that way. I was so inexperienced that I could not discern the too much or too little. One time my work was baked in front, but not baked properly behind; another time I tried to obviate that, and burnt my work behind, but the front was not baked at all; sometimes it was baked on the right hand, and burnt on the left; sometimes my enamels were put on too thinly, sometimes they were too thick, which caused me great losses; sometimes, when I had in the furnace enamels different in colour, some were burnt before the others had melted."

These difficulties belonged to his whole career as a potter, but, of course, more especially to the first years. Then there were difficulties in the choice and management of clays. They differ greatly in their nature. "Some are sandy, white, and very thin, and for these reasons a great fire is needed before they are baked properly." "There are other kinds, which, when they are baked, whether in pottery or in bricks, it is needful that the master of the work take good heed in drawing his affair from the furnace, lest it take cold ; and, what is more, those who work with it are constrained to stop all the vent-holes of their furnace as soon as their batch is baked, because if it felt the very slightest wind in cooling, the pieces would all turn out cracked." Other kinds Palissy enumerates, and by way of illustration, "Once," he says, "I had collected some of the earth of Poitou, and had laboured upon this for the full space of six months before I had my batch complete, because the vessels that I had made were very elaborate, and of a somewhat high price. Now, in making the said vessels of the earth of Poitou, I made some of them of the earth of Xaintonge, on which I had worked for some years before, and was sufficiently experienced in the degree of the fire which was needed by the said earth. And thinking that all earths might bake at a like degree, I baked my work which was earth of Poitou among that of earth of Xaintonge, which caused me a great loss ; inasmuch as the work in the earth of Xaintonge being baked sufficiently, I thought that the other work would be so too ; but when I came to enamel my vessels, those feeling the moisture, it was an unpleasant joke for me ; because as many pieces as were enamelled, came to dissolve and fall to pieces, as a limestone would do soaked in water ; and at the same time the vessels of the earth of Xaintonge were baked in the same furnace, and at the same degree of heat as the above-named, and turned out very well. You see, then, how a man who labours in the art of earth is always an apprentice, because of the unknown nature of the diversities of earth."

"Then, because my enamels did not work well together on the same thing, I was deceived many times ; whence I derived always vexation and sorrow. Nevertheless, the hope that I had caused me to proceed with my work so like a man, that often to amuse people who came to see

me, I did my best to laugh, although within me all was very sad."

Great strength of body must have enabled Palissy to endure, in addition to privation and distress, the intense toil to which he subjected himself in the prosecution of his struggles. But his physical frame bore strong marks of the contest. "I was for the space of ten years," he says, "so wasted in my person that there was no form nor prominence of muscle on my arms or legs; also the said legs were throughout of one size, so that the garters with which I tied my stockings, were at once, when I walked, down upon my heels, with the stockings too. I often walked about the fields of Xaintes considering my miseries and weariness, and, above all things, that in my own house I could have no peace, nor do anything that was considered good. I was despised and mocked by all." More than once breaks out this yearning for domestic love, so simply, with so quaint a pathos, that we sometimes half wonder how a man so loveable could be denied the consolation of domestic sympathy. But it is nothing strange; it would have been more strange had he been mated with a wife as capable as he himself was of endurance. A little figure of a woman with an infant at her breast, modelled by Palissy when he had become a potter, has been thought by some to represent his wife. Designed, like all his other works, in exact fidelity to nature, it at least represents a woman of the provinces, dressed as his wife would have been dressed, and a baby in such swaddling-clothes as his own infant must have worn.

She was afflicted with more grief than I have named; her family was large, but death had removed six of her children. In one of his treatises, speaking of wormwood, Palissy says: "Before I knew the value of the said herb, the worms caused me the death of six children, as we discovered both by having caused their bodies to be opened, and by their frequently passing from the mouth, and when they were near death the worms passed also by the nostrils. The districts of Xaintonge, Gascony, Agen, Quercy, and the parts towards Toulouse are very subject to the said worms."

It is very characteristic that Palissy should not have rested satisfied until he had assured himself, by causing a

post-mortem inspection, of the reason of his children's death. These deaths concern us now as representing to Bernard and his wife an additional large source of pain; the wife might well be dulled in spirit, might easily be broken down into a scold, by poverty and sorrow.

Just now I spoke of the dilapidated outhouse in which the furnaces of Palissy were built. It was, of course, absolutely necessary for the success of his work that his furnaces should be protected from the wind and rain; but to get such protection was not by any means an easy matter. Since there could be no space for a furnace in any room of a small suburban house, Palissy had to make not only a furnace but a shed; and the amateur roofing of a man who had no money to buy materials, was of a character extremely trying to the temper of his wife. At first he borrowed laths and tiles—his clumsy work soon fell into decay; the wind and rain spoilt more than half of it; protection was essential, means of getting it in the usual way did not exist, and Palissy was glad to patch his shed in a rude manner with green boughs and sticks, until he could afford a little money upon more effectual contrivances. These shiftings and changes, of course, fell under the judgment of the entire population of judicious neighbours. In a provincial town with about ten thousand inhabitants, every man is plagued with officious neighbours to the number of about nine thousand nine hundred and ninety-nine. Then, when the holes in his outhouse, on a rainy, windy night, were letting in such blasts as promised the destruction of some costly work, Palissy did not comfort his wife greatly by awakening her with the noise he made in wrenching off perhaps her bed-room door; which, for want of other material, he was obliged to use, at one of his critical moments, for the patching of his ruinous outbuilding. The wife had not enough philosophy to feel that doors, and tables, and house-nails, were such accidents of life as could be parted with for the attainment of an object intellectually high—an object, even in a worldly sense, worth many doors, and nails, and tables. Every day she went out telling new distresses to her neighbours in the town; and every night when Palissy came up to bed, perhaps arousing her long after midnight, cold, wet through, and stupid with work, she ad-

ministered to him the wholesome cordial of a curtain lecture. We will let Palissy state his own case in the matter, and then let women of England judge whether they would not, to a woman, have resented his behaviour.

“ I had another affliction, allied with the before named, which was that the heat, the cold, the winds, and rains, and droppings, spoilt the largest portion of my work before I baked it ; so that I was obliged to borrow carpentry, laths, tiles, and nails, to make shift with. Then, very often having nothing wherewith to build, I was obliged to make shift with green boughs and sticks. Then again, when my means augmented, I undid what I had done, and built a little better ; which caused some artisans, as hosiers, shoemakers, sergeants, and notaries, a knot of old women, all those, without regarding that my art could not be exercised with much space, said that I did nothing but boggle, and blamed me for that which should have touched their pity, since I was forced to use things necessary for my house to build the conveniences which my art required ; and, what is worse, the incitement to the said mockeries proceeded from those of my own house, who would have had me work without appliances—a thing more than unreasonable. Then, the more the matter was unreasonable, the more extreme was my affliction. I have been for several years, when, without the means of covering my furnaces, I was every night at the mercy of the rain and winds, without receiving any help, aid, or consolation, except from the owls that screeched on one side, and the dogs that howled upon the other ; sometimes there would arise winds and storms, which blew in such a manner up and down my furnaces, that I was constrained to quit the whole with loss of my labour ; and several times have found that, having quitted all, and having nothing dry upon me because of the rains which had fallen, I would go to bed at midnight, or near dawn, dressed like a man who has been dragged through all the puddles in the town, and turning thus to retire, I would walk rolling, without a candle, falling to one side and the other like a man drunk with wine, filled with great sorrows, inasmuch as, having laboured long, I saw my labour wasted ; then, retiring in this manner, soiled and drenched, I have found in my chamber a second persecution worse

than the first, which causes me to marvel now that I was not consumed with suffering."

Worse than wind and rain and ruin, was the want of a wife's sympathy in those hours of fatigue and suffering; but I should like to hear of any British matron who is shocked at the behaviour of the wife of Palissy. She had not her husband's courage for a journey among thorns; and truly, there are few men who, for any object, would have courage to go far through such a thicket as that from which we now discover Palissy at length emerging.

It occupied him for fifteen or sixteen years to teach himself by his own genius, without aid from without, the full perfection he attained in the moulding and enamelling of ornamental pottery. During the last eight of these, however—more especially during the last six—he produced many things in his vocation as a potter which enabled him to keep his family in tolerable comfort. At the tenth year he might have stopped and rested comfortably on his profitable knowledge, but Palissy never did stop, he never did account himself to have attained an end; to the eye of his genius there lay always before every range of thought a long vista of almost infinite improvement. Palissy was at no time satisfied with his attainments; no man with a grain of true philosophy within him ever yet has been self-satisfied. After fifteen or sixteen years, Palissy took heart to call himself a potter; but he still laboured ever to advance in his own art, still spent a large part of his earnings in experiments and labours, tending to a point of excellence not yet attained. The sixteen years formed his apprenticeship. "I blundered," he says, "for the space of fifteen or sixteen years. When I had learnt to guard against one danger, there came another, about which I had not thought. During this time I made several furnaces, which caused me great losses before I understood the way to heat them equally. At last I found means to make several vessels of different enamels, intermixed in the manner of jasper. That fed me for several years; but, while feeding upon these things, I sought always to work onward with expenses and disbursements—as you know that I am doing still. When I had discovered how to make my Rustic Pieces, I was in greater trouble and vexation than before; for having made a certain number of rustic basins, and having put them to

bake, my enamels turned out, some beautiful and well melted, others ill-melted ; others were burnt, because they were composed of different materials, that were fusible in different degrees—the green of the lizards was burnt before the colour of the serpents was melted ; and the colour of the serpents, lobsters, tortoises, and crabs, was melted before the white had attained any beauty. All these defects caused me such labour and heaviness of spirit, that before I could render my enamels fusible at the same degree of heat, I thought that I should be at the door of my sepulchre.”

A stranger to the kind of ware produced by Palissy may fairly wonder what he means by his mysterious allusions to the green of the lizards, the colours of the serpents, the enamelled lobsters, tortoises, and crabs. The pottery made by Bernard Palissy, of which, under the name of Palissy ware, exquisite specimens are still existing, was of a kind extremely characteristic of its maker. He wished to make beautiful things, but he was a naturalist, and his sense of beauty was his sense of nature. To reproduce upon his ware the bright colours and elegant forms of plants and animals over which he had hung so often with his pencil in the woods and fields—combining his qualities of naturalist and potter—he founded his reputation on the manufacture of what he called *Rustic Pieces*. The title which he took for himself was that of *Worker in Earth and Inventor of Rustic Figulines* (small modellings)—*Ouvrier de Terre et Inventeur des Rustiques Figulines*. These rustic figulines were, in fact, accurate models from life of wild animals, reptiles, plants, and other works of nature, detached or tastefully combined as ornaments into the texture of a vase or plate. The rich fancy of Palissy covered his works with most elaborate adornment ; but his leaves and reptiles, and other “rustic” designs, are so copied in form and colour with the minute accuracy of a naturalist, that the species of each can be determined accurately. There has been found scarcely a fancy leaf, and not one lizard, butterfly, or beetle, not one bit of nature transferred to the works of Palissy, which does not belong to the rocks, woods, fields, rivers, and seas of France.

Enough has now been said concerning the toils of Palissy during his sixteen years’ struggle to acquire the

art of manufacturing enamelled pottery. The close of that period will bring us to the year 1557, the age of Palissy then being about forty-eight. At this point, therefore, we leave the history of Palissy the Potter, to chronicle the toil of the same active mind on other paths of progress.

Book the Third.

THE REFORMER.

1557—1562.

CHAPTER I.

THE REFORMED CHURCH AT SAINTES.

“THERE was in this town a certain artisan, marvellously poor and indigent, who had so great a desire for the advancement of the Gospel, that he demonstrated it every day to another as poor as himself, and with as little learning, for they both scarcely knew anything ; nevertheless, the first urged upon the other that if he would employ himself in making some form of exhortation, that would be productive of great fruit.”

The “certain artisan, marvellously poor and needy,” would have been named, had he been any other man than Palissy himself. The mode of expression, and the known character of Bernard, leave us very little room for doubt that it was he who, in the days of his hard struggling, being unable to find consolation in the orthodox services of the town, satisfied the strong devotional impulses of his character by studying the scriptures daily with one poor companion. The writings of Palissy display throughout a close and reverent acquaintance with the Bible ; his quaint cheerfulness of temper, his artless, simple-minded style, are beautifully mingled in his works with a solemnity of religious feeling that would have led to asceticism any man with a less healthy intellect. The grave, uncompromising piety of the Huguenot, who knew that he might be called upon to die for his faith, formed a large feature in the character of Palissy. Very earnestly he sought after religious truth, and what he thought he spoke with perfect fearlessness. We have found out by this time, that when his way was chosen, it formed no part of the character of Palissy to flinch from trouble.

Bernard, then, while he toiled and suffered in acquiring the skill which was to make him immortal in the history of art—Bernard, at that time “marvellously poor and

indigent," demonstrated the truths of Scripture daily to another man, poor like himself. Then, distrustful of his power or his leisure to prepare for a more public exposition, he communicated to his friend the impulse of his own active spirit, and urged him to "employ himself in some form of exhortation, that would be productive of great fruit."

His friend felt himself to be too simple and unlearned, but the persuasions of Bernard gave him courage; "and some days afterwards," Palissy tells us, "he assembled, one Sunday in the morning, nine or ten persons, and because he was ill versed in letters, he had taken some passages from the Old and New Testament, having them put down in writing. And when they were assembled, he read to them the passages and texts, saying: 'That each man, according to the gifts he had received, should distribute them to others; and that every tree which bore not fruit, would be cut down and cast into the fire.' Also, he read another text, taken from Deuteronomy, where it is written: 'Thou shalt declare my words, when thou sittest in thine house, and when thou walkest by the way, when thou liest down, and when thou risest up; and thou shalt write them on the door-posts of thine house, and on the gates.' He proposed to them, also, the parable of the talents, and a great number of such texts; and this he did, tending towards two good ends: the first was to show that it was the duty of all people to speak of the statutes and ordinances of God, and that his doctrine might not be despised on account of his own abject state; the second end was to incite certain auditors to do as he was doing; for in this same hour they agreed together that six from among them should make exhortations weekly—that is to say, each of the six once in six weeks, on Sundays only. And because they undertook a business in which they had never been instructed, it was said that they should put their exhortations down in writing, and read them before the assembly. * * That was the beginning of the Reformed Church of the town of Xaintes."

Palissy adds, "I am sure there was, at the beginning, such a congregation, that the number was of five alone." Each of the six took his turn to be the preacher to five listeners, and of these Palissy was one; his name is chronicled in a contemporary list of preachers. Six poor

and unlearned men, among not a few who were infected with the taint of heresy, were all who had the boldness, with grave faces and determined minds, to form themselves into a Church in that town which had so recently beheld the burning of a heretic. Poor as they were, perhaps they were below the wrath of a grand vicar, and it may be that M. Collardeau had warmed himself sufficiently at the first bonfire of his making.

But there was imprisoned in the town of Saintes, and through the zeal of this fiscal attorney Collardeau, "one named Master Philebert Hamelin." Philebert had taught the Reformed doctrine, and had contributed by his advice some part of the impulse towards that formation of a little Church which took place while he was in prison. He was a zealous man, gifted with rare eloquence, and wonderfully active. Born at Chinon, in Touraine, he had begun the business of life as a priest. His home being near Poitiers, it was, perhaps, by Calvin, or more probably by Vernou, that he was induced to renounce Catholicism. When he did that, he joined the priests and monks who fled into the isles of Aunis and Saintonge. There he was seized, with others, and while the Church, to the foundation of which he had contributed, was being formed, in 1546, he was a prisoner. By some dissembling of his faith, for which he afterwards "had always a remorse of conscience," Philebert obtained his freedom at that time, and travelled to Geneva. There, at the head-quarters of the French Reformers, he acquired a great increase of earnestness; "He enlarged," Palissy tells us, "at the said Geneva, both his faith and his doctrine. Then," continues Bernard, "because he had dissembled in his public confession in this town, and wishing to repair his fault, he exerted himself, wherever he went, to incite men to have ministers, and to erect some kind of Church, and so travelled through the lands of France, having some servants who sold Bibles and other books printed in his press; for he had given his mind to it, and made himself a printer. In doing this, he passed sometimes through this town, and went also to Allevert. Now he was so just, and of so great a zeal, that although he was a man incapable of walking, he would never accept horses, although many urged him so to do with full affection. And being slenderly provided as to the wherewith, he took with him

no other outfit than only a simple staff in his hand, and went his way alone, in this manner, without any fear.

“Now it occurred one day, after he had concluded some prayers and little exhortations in this town—having at most seven or eight auditors—he went upon his way to Allevert, and, before parting, he prayed the little flock of the assembly to congregate themselves, to pray, and to exhort one another; and so he went to Allevert, labouring to win the people to God; and there, being received kindly by the chief part of the people, brought them by the sound of a bell to certain sermons, and baptised a child. Seeing which, the magistrates of this town constrained the bishop to produce money for the maintenance of a pursuit of the said Philebert, with horses, gens d’armes, cooks, and sutlers.”

The quick painter’s fancy of Palissy, and the clearness of thought which guides him always to the fittest words, have filled his works with a great deal of picture-writing. Nothing could be more happily sketched than this representation of Philebert, “a man ill capable of walking, who took with him no other outfit than only a simple staff in his hand, and went his way alone in this manner, without fear,” to whom Palissy drily appends a pursuit “with horses, gens d’armes, cooks, and sutlers.”

Undoing as they could the mischief that had been done by the heretic, the bishop and certain magistrates of Saintes betook themselves to the scene of the calamity, and caused the child which had been baptised by Philebert to be re-baptised into orthodoxy. It was by this Philebert that the Reformed Church of Allevert had been founded in the autumn of 1555. He had since that date frequented other towns and villages, Saintes more than any, for since it was there that he had sinned publicly by the abjuration of his faith, he was most anxious there to publish his repentance and undo the evil he had done. But Saintes was a stronghold of Catholicism. Elsewhere Philebert assembled multitudes, including many persons of high social rank, but there, after two years of indefatigable labour, he was surrounded only by the little flock of seven or eight men, with whom knelt Bernard Palissy. For help in his difficult work he had sent to the Church at Paris, and by that Church there had been despatched to him as an ally a young minister, full of energy, named

André de Mazières, commonly known by the name of De la Place. This Reformer had not been checked in his career by witnessing at Bordeaux the burning alive of Arnaud Monier and Jean de Gazes. While the arrival of De la Place was looked for, and the members of the little Church at Saintes were supporting one another by mutual exhortation, Philebert went to Allevert. Then it was that a child—the child of Jean de Vaux—baptised by him, was torn from the arms of its resisting mother to be re-baptised by the bishop. Philebert, hunted down by horses and gens d'armes, was taken in the château of a friend and follower, the Seigneur de Perissac. “And so,” says Palissy, “they brought him into this town, as a malefactor to the criminals prisons, although his works gave certain witness that he was a child of God and truly of his chosen. He was so perfect in his works, that his enemies were compelled to own that he was of a holy life, always without approval of his doctrine.”

This second imprisonment of Philebert Hamelin took place in the beginning of the year 1557, the date named at the end of the preceding chapter, as the last year of Bernard's first sixteen as a potter. The date concerns us, because Philebert Hamelin commanded the love and reverence of Bernard Palissy, and there is connected with this event a circumstance which admirably illustrates the potter's earnest character. Notwithstanding all the terrors threatened against heretics, Bernard Palissy spent his whole energy, when Philebert was cast into prison, in labour on his friend's behalf. Careless of any danger to his own life (and we shall hereafter see that he incurred no trifling risk), the grand-hearted potter visited six of the chief judges and magistrates, attacking each of them in his own house with a bold remonstrance. Revealing his own heresy to men bound to condemn it was nothing; he thought only of doing battle against a monstrous wrong, and proclaiming the virtue of Philebert, who had been, since the old time when he was in Saintes, before his previous imprisonment, until now, for eleven years, his venerated friend.

“I am full of wonder,” Bernard says, “that men should have dared to sit in judgment of death over him, seeing that they knew well, and had heard, his blameless conversation; for I am assured, and I can say with truth, that

after the time when he was brought into the prisons of Xaintes, I mustered hardihood (although the days were perilous in those times) to go and remonstrate with six of the principal judges and magistrates of this town of Xaintes, that they had imprisoned a prophet or an angel of God, sent to announce his word and judgment of condemnation to men in the last days ; assuring them that for eleven years I had known the said Philebert Hamelin to be of so holy a life, that it seemed to me as if the other men were devils when compared to him. It is certain that the judges used humanity towards myself, and heard me kindly ; also I spoke to each of them in his own house.

“ Finally, they treated with tolerable kindness the said Master Philebert, although they could not acquit themselves of being guilty of his death. True it is, they did not kill him, as Pilate and Judas did not kill the Lord ; but they delivered him into the hands of those by whom they knew well that he would be slain. And the better to come by a wash for their hands that would acquit their hearts, they reasoned that he had been priest in the Roman Church ; therefore they sent him to Bourdeaux, with good and sure guard, by a provost-marshal.

“ Would you know,” continues Palissy, revealing much of his own character while he applauds his friend—“ would you know how holy was the life of the said Philebert ? Liberty was given to him to live in the apartment of the gaol-keeper, and to eat and drink at his table, which he did while he was in this town. But after, for many days, he had laboured and taken pains to repress the gamblings and blasphemies which were committed in the chamber of the gaol-keeper, it was so displeasing, seeing that they would not check themselves, that to prevent himself from listening to such evil, as soon as he had dined, he caused himself to be led into a criminal cell, and remained there the whole day long in solitude, to avoid the evil company.

“ *Item.* Would you know still better how he walked uprightly ? To him, being in prison, there came an advocate of France, belonging to some region in which he had founded a little Church, which advocate brought three hundred livres, which he offered to the gaol-keeper, provided he would, at night, put the said Philebert outside the prisons. Seeing which, the gaol-keeper was almost incited to do it ; he requested, however, to take counsel

with the said Master Philebert, who answering, told him, 'That it was better worth his while to die at the hands of the executioner, than to expose another man to evil for the good of self.' Which learning, the said advocate took back his money. I ask you, which is he among us who would do the like, being at the mercy of enemies as he was? The judges of this town knew well that his life was holy; nevertheless, they acted through fear, lest they should lose their offices: so we must understand it.

"I was well informed," adds Bernard, "that while the said Philebert was in the prisons of this town, there was a person who, speaking of the said Philebert, said to a counsellor of Bourdeaux: 'They will bring you, one of these days, a prisoner from Xaintes, who will speak to you well, messieurs.' But the counsellor, blaspheming the name of God, swore that he should not speak to him at all, and that he should take care not to be present at this judgment."

It was not in the temper of the sturdy potter to see wrong committed and to fold his hands in peace; we readily anticipate, therefore, his comment on the indolent determination of the counsellor: "I ask you whether this counsellor called himself a Christian, who would not condemn the just? At any rate, since he was constituted judge, he will have no excuse; for while he knew that the other was a good man, he ought with his power to have opposed the judgment of those, who through ignorance, or through malice, condemned him, delivered him up, and caused him to be hung like a thief, the 18th of April, in the above-named year."

That is to say, in the year 1557. A contemporary historian of the Reform party connects with the death of Hamelin a quasi miracle. A heretic who was to have shared his fate, recanted his opinions to save his life. Hamelin warned him that he would, notwithstanding, die. This companion was assassinated as he left the prison, and Philebert was questioned for the purpose of ascertaining whether his prophecy did not imply complicity. Of course it did not. Indeed, the whole anecdote may be untrue; for there were not a few divine interpositions current, as arguments, among religious combatants on either side. For example, the historian above mentioned cites, with full credence, a contemporary book called

"Dan," in which there seems to have been collected a most edifying set of stories, about judgment done on persecutors. The following is one: "A Piedmontese in Angrongne, having sworn that he would eat the nose of the pastor, a wolf, in broad noon, and before a great multitude, going to this man, devoured his nose, and returned without wounding any other person, as if he had no other business to do." Such tales remind us of the ignorance and superstition proper to the world three centuries ago—conditions which we might too easily forget while we have our minds intent upon the intellect of Bernard Palissy.

During the last imprisonment of Philebert Hamelin, the young minister sent by the Church at Paris, M. de la Place, arrived. He was succeeded after a few years by another minister named De la Boissière. "While the Church was so little," Palissy tells us, "and the said Master Philebert was in prison, there arrived in this town a minister named De la Place, who had been sent to go and preach at Allevert. But on the same day, the attorney of the said Allevert happened to be in this town, who assured him that he would be very unwelcome there, on account of that baptism which Master Philebert had performed; because several assistants thereat had been condemned to very heavy penalties, and it was for this reason that we prayed the said De la Place to administer to us the word of God; and he was received for our minister, and remained until we had Monsieur de la Boissière, which is he whom we still have at the present time. But this was a pitiable thing, for we had the goodwill, but the power to support the ministers we had not; inasmuch as La Place, during the time that we had him, was maintained partly at the expense of the gentlemen, who frequently invited him." The pastors of the Reformed faith, being superior to the monks in taste and education, formed to courtly men, indifferent about religious strife, agreeable associates. La Place, therefore, had been a frequent guest at the houses of the neighbouring gentlemen; but the stern, rough, earnest artisans who formed the little Church had doubts concerning the propriety of this arrangement; and Bernard, with manifest pity for the next pastor, who was over-zealously controlled, goes on to relate how, "Fearing lest that might not be the

means of corrupting our ministers, they advised M. de la Boissière not to leave the town, except with permission, to attend upon the nobility, even though it might be upon urgent business. By such means the poor man " (he was a gentleman of Dauphiné, who, after his conversion, had betaken himself to Geneva, and there studied under Calvin) " was shut up like a prisoner, and very frequently ate apples, and drank water for his dinner ; and for want of tablecloth he very often laid his dinner on a shirt, because there were very few rich people who joined our congregation, and so we had not the means of paying him his salary."

The laws against heresy were so stringent, that the life of any man who was a known heretic depended wholly on the sufferance of his neighbours. In the early years of the Reformed Church at Saintes, it was necessary for the members of the little flock to slip at midnight through the streets, and hold their mutual exhortations under cover of the darkness. But with time, in many parts of France, the manifest contrast between the orderly and upright lives of the new pastors and the abuses of the priesthood caused the power of the heretics to grow. The sympathies of the people, the desire of relief from Church burdens, which were cruelly unjust, caused many bold, unruly spirits to enter the ranks of the Calvinists, and assume an external show of much ascetic virtue. Many such men, who had thought of political reform alone, afterwards changing sides, let loose the passions which they had so long affected painfully to curb, and were among the wildest spirits in the storm for which the clouds had long been gathering.

There were few places in which the heretics multiplied so rapidly as in Saintonge. Passions were nowhere stronger, no place was more trampled by combatants—it was the scene of many of the maddest contests in the subsequent religious war. The timid beginning, the rapid increase, and, finally, the bold predominance of heretics in Saintes, are all described by Palissy.

"The Church," he tells us, "was established in the beginning with great difficulty and eminent perils ; we were blamed and vituperated with perverse and wicked calumnies . . . Notwithstanding all these things, God so well favoured our affair, that although our assemblies

were most frequently held in the depth of midnight, and our enemies very often heard us passing through the street, yet so it was, that God bridled them in such manner that we were preserved under His protection. And when God willed that His Church was manifested publicly, and in the face of day, He fulfilled in our town an admirable work; for there were sent to Toulouse two of the principal chiefs, who would not have permitted our assemblies to be public, which was the reason why we had the hardihood to take the Market Hall."

Throughout France there was a division among magistrates with respect to the interpretation of the penal edicts against heresy. Men are not by nature devilish, and the extreme severity of law in very many places being odious to its administrators, was either left in the dead letter, or interpreted into a milder spirit. The absence of the two men whose zeal was to be feared, gave a boldness indicating already considerable strength, when it encouraged the Reformers to hold their meetings in the Market Hall. The absence of these men was long. Palissy tells us, "God detained them for the space of two years, or thereabout, at Toulouse, in order that they might not hurt His Church during the time that He would have it to be manifested publicly."

The bold act of Claude de la Boissière in standing forward as the first of the ministers in Saintonge who held at the solicitation of his people the Reformed services in public did not pass unchallenged. When the first assembly was held by him in the market-place, the mayor, accompanied by the grand-vicar and several other officers, hurried to the spot. They demanded of the pastor by what right he was preaching publicly, and forbade him to continue. The minister replied that he was chosen by the faithful, and elected by the pastors of the Church of God to announce the tidings of the Gospel, and exhort his brethren to live in the fear of God, and in obedience to the king and all other authorities. The mayor offered no further objection, and the example of M. de la Boissière was followed speedily by many of his colleagues.

These last events were subsequent to the year 1557. The remarkable prosperity of the Reformed Church of Saintonge, which was of brief duration, dates from about 1560. There is preserved in the library at Geneva a

manuscript letter to Calvin from M. de la Boissière, which reports upon the subject in the manner following :

“ Salutation in the Lord.

“ MONSIEUR AND FATHER,—Fearing that by our silence we should not satisfy the holy desire you have to be informed of the advancement of the kingdom of Our Lord, though you are occupied by numberless affairs, I could not venture to defer writing to you the present letter, to the end that you may be certified as to the disposition in which we stand in this district, which is, that God has in such manner augmented his Church, that in this province we now number by the grace of God more than thirty-eight pastors, but every one charged with so many towns and parishes, that if there were fifty more of us we scarcely could perform half the duties that present themselves. On which account, following your advice, we have sent some young people to Geneva to prepare themselves for the ministry, and are now sending the bearers of this, from whom you will be better able to learn the graces and the prosperity that God has suffered us to witness in these parts. For which reason I occupy your time no further for the present, except to present to you the humble remembrances not only of my Church, but also of the pastors of this province, a duty with which I charged myself at the provincial synod held in this town on the first of March. And upon this I shall pray God that it will please Him, Monsieur and Father, to preserve you to His people and to His eternal glory.

“ From Xaintes, this 6th of March, 1561.

“ Your humble and obedient son,

“ C. BOISSIÈRE.

“ To Monsieur, Monsieur Calvin, at Geneva.”

Of Saintes, during this period, Bernard says : “ In that way our Church was established ; in the beginning by despised folk ; and when its enemies arrived to waste and persecute it, it had so well prospered in a few years that already the games, dances, ballads, banquets, and superfluities of head-dress and gildings, had almost ceased ; there were almost no more scandalous words or murders. Actions at law were beginning greatly to diminish ; for as soon as two men of our religion began an action, means

were found to bring them to accommodation ; and even very often before commencing any suit, one man did not begin to proceed against another until first he had caused him to be reasoned with by members of the Church. When the time came for Easter preparations, many engaged in hatreds, dissensions, and quarrels, were reconciled. The question was not only about psalms, prayers, canticles, and spiritual songs, any more than it was only a quarrel against dissolute and lewd songs. The Church had so well prospered, that even the magistrates had assumed the control of many evil things which were dependent upon their authority. It was forbidden to innkeepers to have gaming in their houses, or to give meat and drink to people who inhabited houses in the town, in order that the debauched men might be returned to their families. You would have seen in those days, on a Sunday, fellow-tradesmen rambling through the fields, groves, and other places, singing in troops psalms, canticles, and spiritual songs, reading and instructing one another.

“ You would have seen the daughters and virgins seated by troops in the gardens, and other places, who, in a like way, delighted themselves in the singing of all holy things. On the other hand, you would have seen the teachers, who had so well instructed youth, that the children had even no longer a puerility of manner, but a look of manly fortitude. These things had so well prospered, that people had changed their old manners, even to their very countenances.”

Children so well instructed that they lose their puerility of manner, fellow-tradesmen who sing hymns among the fields and groves, would promise little good in our own day. But when a child of fifteen was not too young for the stake, when the daughters and virgins might be stabbed for their singing, and fellow-tradesmen broken on the wheel for exercising liberty of conscience, then it was fit that people should “ change their old manners, even to their very countenances ;” that they should sternly sing their hymns in the free air of heaven, and defy, when they could, the law that made itself a god over the soul.

CHAPTER II.

AFFAIRS OF FRANCE.

PALISSY THE POTTER was extremely busy when King Francis I. died. The affairs of Palissy, at that time, concerned us more than the affairs of France ; we simply nodded acquiescence to the fact when the state went into mourning, if we were not even perhaps so disrespectful as to neglect it altogether. We have arrived now, however, at a period when the affairs of France are likely often to be the affairs of Bernard Palissy. The potter has succeeded in his art ; he can make articles of luxury which are to be had from no other hands in France ; he is a man, therefore, for the luxurious to patronise. We shall find high and mighty personages soon connected with the daily life of the successful artisan. For other reasons also some of the affairs of France will soon begin to touch the interests of Bernard the Reformer.

We shall, of course, not trouble ourselves about affairs of France as they have to be told by the historian ; the wars we leave out altogether, and substitute for them a word or two concerning the Fayence of Henry II. ; in other respects our attention has to be confined to things and people that can be common at once to a history of France and to a history of Bernard Palissy.

Let us go back to the reign of King Francis I., and to the year 1545 (he died in 1547) ; there we touch upon an exemplary slaughter, by the most Christian king, of several thousand heretical Vaudois, massacred horribly, men, women, and children, on the confines of Provence, and Venaissin. Yet there were some who, looking at his majesty's alliances with Protestant German princes, accused him of want of zeal against the heretics. "Want of zeal !" cries Mazeray, "when every year heretics were burnt by dozens, sent to the galleys by hundreds, banished

by thousands." Yes, indeed, want of zeal. They should have been burnt by thousands, doomed to the galleys by hundreds, and exiled by dozens, had King Francis been in earnest. The Vaudois massacre was something, indeed ; but what credit is to be attached to a mere fitful gust of goodness ?

And what could be expected in the way of zeal from the head of a court whose manners I dare not whisper into the ears of the modest nineteenth century ? The gallant king, the hero of romance and ballad, partner in the Field of the Cloth of Gold, presider at good-old-time tournaments, the "Kaiser Franz" of Schiller's ballad about the Proud Lady and the Glove, lived after a way from which the pure heart turns with an unutterable loathing. He died in 1547, as kings used once to be fond of dying, with his family about him, giving sage and prudent counsel to his heir, making his farewell bow to this world, with his hand upon the door that led into the next, in a most graceful and becoming manner. The Vaudois massacre rumbled, perhaps, a little in his conscience, but not much ; he had already laid any blame connected therewith on the shoulders of his servants.

King Francis left his crown to his son Henry, who had not been always his heir ; but the original dauphin, Francis, had been taken already from this world. He died by poison, some said ; and so, most undoubtedly, he did. But the poison was of a kind well known to surgeons, and not unfamiliar to the court of France, which sometimes horribly destroys the men who give the rein too freely to their passions. Truly, there was no stake or gibbet in the country able to administer to man so vile a death as that which had deprived King Francis of his eldest son. Though, to be sure, there were not many courtiers in France who would at that time have thought it vile. Why should not scars of love be as well honoured as the scars of war, since there can be no doubt that, as war was understood in those days, they were the result of equally good service to mankind ?

Henry, then, as King Henry II., at the age of twenty-nine, in the midst of a general—and, of course, deeply sincere—mourning, succeeded his great father, Francis. The funeral oration over the late king was pronounced by a most learned man, Pierre du Châtel, latinised Castelan,



Bishop of Maçon. The bishop duly pronounced the said oration, which was, as such things ought to be, a tomb-stone-piece upon the grandest scale. Among other things, it was said by the bishop of the late king, "His death has been so pious, that I think his soul must have flown straight to heaven, without the need of any cleansing in the fire of purgatory." If his life had been pious, that would have been a better recommendation. The only field for ambition—the only luxury for self-love—left upon a death-bed, is to hang out as brilliant a show as possible of moral lights for the illumination of by-standers. I should have doubted, therefore, the bishop's plea for the deplored monarch's exemption from the taxes of the other world. Many worthy auditors not only doubted, but were greatly scandalised at the suggestion. Not that they honoured Francis less than the good bishop did, but that they honoured purgatory more. No man, however pure, however royal, could go into the next world, from this, without passing through the turnpike-gate of purgatory, as established by the holy Church. No doubt there was a carefully adjusted scale of tolls, and the charge might be inconsiderable for the passage of an orthodox king; but still there would be some charge, and he must pay it. The doctrine of the Bishop of Maçon was heretical and revolutionary. The auditors thus scandalised denounced the bishop to the university; the university regarded the question as a matter of so much importance that it sent a solemn deputation to the young king, which was met at the door of the palace by Jean Mendoza, first maître d'hôtel, a witty Spaniard. Mendoza greeted in a friendly way the solemn embassy: "You are welcome, gentlemen; you come to discuss with the grand-almoner the travels of King Francis since he left us, and ascertain what stay he made in purgatory. Walk in, if you please. For my part, I can tell you, I knew our late master very well, and I am sure that he was not the man for stopping long in any place, or about anything. He was always for change in this world, and so he is, no doubt, in the next. If he did drop in upon purgatory, he could not do more than taste the wine and travel on; I know King Francis." Such banter strangled the discussion, and Du Châtel was made grand-almoner next year. That a question like this should have arisen; that, having

arisen, it could be destroyed by banter ; that a court like that of King Francis, upon the strength of religious feelings so artificial, should judge to be irreligious, and condemn to death men leading pure, ascetic lives, and mastered by religious feeling so sincere as, for example, that of Palissy, is matter that suggests a painful aspect of the temper of those wretched times.

So in the year 1547 we have upon the throne of France Henry II., aged twenty-nine, a man with a feeble brain and a strong fist. He was at home in the license of the court, and he was at home upon the field of battle ; as he had been trained to arms under the Constable Montmorenci, it is not a bad point in him that he retained a pupil-like affection for his ancient leader. On King Henry's accession, the great crowd of nobles round the throne divided itself into four factions, each pledged to the interests of a distinct chief. There were the partisans of the Constable Montmorenci, and the partisans of his great rivals, the House of Guise—the Duke of Guise, a military commander of great skill, and his brother, Cardinal of Lorraine, the same cardinal of whom we heard the Draper speaking in an early chapter of this narrative. Those were the two parties headed by men ; the other two factions were devoted respectively to Diana of Poitiers and to the Queen Catherine of Medicis. As the story of the life of Palissy will shortly flow between banks peopled by the high and mighty of the nation, we shall find it necessary to refresh our memories concerning the position held in France by some of these great people.

The Constable Anne de Montmorenci was during a large part of his life next to the king the most important man in France. This personage possessed enormous wealth, and we are presently to see him standing in the first rank among the patrons of that skill which Bernard Palissy has won for himself through so much suffering. The Constable, therefore, has a special claim upon these pages. He was born at Chantilli in 1493, and named after Anne of Brittany, his godmother. Godmothers, fortunately, do not often claim the privilege of christening male children into the female sex. He was a year older than King Francis I., and having been his playmate when his majesty was Count of Angoulême, had gained in early

years an influence over the mind of Francis which was long retained. Young Montmorenci fought in the Italian wars, and was created a marshal in 1522, that is to say, when he was twenty-nine. It is always advisable to connect a man's age distinctly with the events and actions of his life, because their significance is at all times greatly modified by considerations that arise from knowledge of that kind. Montmorenci has been already mentioned as seen by Montluc struggling on foot at the battle of Bicoque. At Pavia he was taken prisoner, and carried with King Francis, his friend, to Madrid. Francis would have retained him as a companion in captivity. Montmorenci, however, having prudently suggested that it would be better that he should return to France and labour about the releasing of his master, this suggestion was thought good. He did so release himself by ransom, and did so labour on the king's behalf with good effect, since he was afterwards made, in reward for his services, governor of Languedoc and grand-master of France. With this last office was connected the administration of affairs.

In 1536 Charles V. made an attempt to subdue France by invasion. Montmorenci, then aged forty-three, commanding the army of defence, ruined the emperor by wise delays, and forced him to retreat, avoiding a battle, the loss of which might for a season have destroyed the monarchy. The French, even in those days, had a taste for Roman parallels, and they called Anne, Cunctator, or the Fabius of France.

On the 10th of February, 1538, Montmorenci, aged forty-five, was appointed constable, being the fifth of his family who had attained that honour. He was then by far the greatest man in France, and received homage and presents from foreign states, not only of Europe but of Asia, being courted abroad as a man not less mighty than his king. He was an austere man, very much too rough to be agreeable at court; his wealth had become enormous, and he stood upon the pinnacle of power. There is not much room for a man's feet upon that pinnacle, and Montmorenci slipped, as they who are in his position generally do. He was disgraced in 1541, three years after he was made a constable; deprived of no office or possession, losing nothing but the royal favour; and he dispensed proudly with that, retiring to his birthplace of

Chantilli, where he lived in a state of sullen grandeur till King Francis died. Why he was disgraced it is not easy to tell ; some hold him to have been so rough a bear among the perfumed ladies who were powerful at court, that they all set their wits against him ; others say that the king was jealous of the close attachment between Montmorenci and his son Henry ; certainly, among the death-bed advice of the king was an item, that Henry ought not to recall Montmorenci from seclusion.

Henry did not keep that precept, for upon the death of Francis he lost no time in summoning his friend the constable to court, where he styled him *Compeer*, as a man who was his equal, and received him with a manifest affection. Constable Montmorenci, therefore, at the age of fifty-four, returned to court, and was the head acknowledged by one of the four court factions by which the throne of the new king was surrounded.

In political affairs rivalry meant enmity three centuries ago. Therefore the Guises and their friends, rivals of Montmorenci, used against and suffered at the hands of the Montmorenci faction all the tricks and stratagems which a court enmity dictates.

And then there were the two ladies and their partisans. There was Diana of Poitiers, or of St. Vallier, widow of Louis de Biézé, grand-seneschal of Normandy. She bore the honourable title of King's Mistress, and was made Duchess of Valentinois. This lady had made her first appearance some time since at the court of King Francis, in the interesting character of a distressed damsel pleading for her father. King Francis appreciated her beauty ; she went home affected by his knightly courtesy. After her husband's death she came to reside permanently at the court of Francis ; and there, seeing that the education of Prince Henry was very much neglected, she undertook to play the part of governess to the boy after a fashion of her own. She begged him of King Francis for her chevalier ; the best way to touch the understanding, she said, was through love. So, though she was a widow with more than one marriageable daughter to dispose of, she took Henry for her knight. The youth was pleased ; the attention of a full-sized woman greatly flatters a three-quarter-sized man ; the only curious part of the transaction is, that Henry clung as firmly to his mistress in love

and peace as he had clung to his master in war. Diana of Poitiers maintained her ascendancy, as well as Montmorenci maintained his, during the whole life of the king. Diana held a brilliant court at the expense of the Reformers (she being the principal receiver of their confiscated goods), and was a little more to King Henry than his wife, though it is quite possible that she was king's mistress only according to the old knightly meaning of the word. Nothing opposes itself to that supposition but a knowledge of the intense grossness of court morals during Henry's reign. They had been licentious under King Francis; but under Henry, who had much of the camp breeding in himself, the film of outward courtesy, the elegant gloss and fiction of speech, the polite *double entendre*, and all such devices which at least make payment of a tacit tribute to the sense of what is decent—these were laid aside, and the bare, hard brutality of a licentious camp furnished a model for the conduct of the court of France. Diana of Poitiers was then the head of the third faction of courtiers.

But the poor queen, the wife of Henry!—if it were only possible to pity her. She was twenty-eight years old when her husband succeeded to the throne. King Francis had allowed his son Henry to marry her, because in the first place he wanted money, and her father Lorenzo was rich; in the second place, because he did not greatly care for his son Henry, and did not mind throwing him away upon a girl who was an unequal match, for he did not then suppose that Henry would ever come to be a king, and make a queen of her. Thus Catherine of Medicis found herself looked down upon from all sides as an insignificant person whose alliance conferred anything but honour on the royal blood of France. Pitiably as her position was, she needed no man's pity. She was not trained to very tender feelings, and she was diplomatist enough to show a smooth face to the world, though she knew that she was pretty widely hated, and that she had a pretty wide circle of hates to pay back in return. Petty princes are profound in all minor diplomacy, and Catherine's mind had been fed early with that kind of meat. So when her husband became king, and she was Queen Catherine, and had her own faction at court, she outwardly professed the gentlest feelings towards Diana of Poitiers, towards the

Duke or Cardinal Guise, and towards Montmorenci, although their mutual hatreds and their factions were notorious. She was a pretty and a witty woman, and during the life of King Henry, she allowed him to pay what attentions he would to Diana, while she waited with a great appearance of placidity in the background, among all the overruling influences of the court. She caressed Diana, flattered the rugged constable, and so became, after all, a woman of great power, before she was nailed down into her coffin.

In the midst of these factions lived King Henry, getting up at seven and going to bed at ten; between those hours, one would think, not the happiest of men. The business at court of each faction was to get what it could, and to keep what it could out of the getting of the other three. Whenever a living, or estate, or appointment, however small, had fallen, or was about to fall, into the king's gift, there was a rush, not of obsequious beggars, but of tyrannical exacters. The small men of each faction formed a network of spies over the country, who reported to its chief any mouthful that they met with anywhere worth picking up. Of this the Draper has told us something in his eulogy upon the Cardinal de Guise. Perhaps the king had promised something to a friend of his friend Montmorenci; then the next day there would come to him the Duke of Guise, with his proud stern face of military command; and he would ask for it. The king would murmur "Montmorenci"—say the place was given. Whereupon the duke would so argue down his majesty, that in the end—and I relate what is recorded of one such occasion—the king did not dare to fulfil his promise to Montmorenci, because he feared the stern Duke of Guise, nor could he give the place to a Guise without enraging Montmorenci.

One of the first acts of the new king was to issue an edict confirmatory of religious penalties. A blasphemer was to have his tongue pierced with a hot iron, but all heretics were to be burnt alive.

I hinted, some chapters ago, that the people of Saintonge did not very quietly endure the salt-tax. They broke out into a rebellion about a year after the accession of Henry, in 1548. While Palissy was in the depth of poverty, labouring at his furnace, a scene of riot and violence was enacted for some months in Saintonge and

the surrounding districts. It began in Angoumois, and extended to the Bordelais, Agenois, Perigord, La Marche, Poitou, Aunis, and Saintonge. The first insurgents were the country people, who took arms and expelled the officers of the gabelle. The people of Saintonge—this was in 1547—massacred eight of them. The people of Perigueux were content that theirs should be expelled. Henri d'Albret, governor of Guienne, sent troops against the insurgents, but his troops were driven back. Deserters and disbanded captains had been scattered by the constant state of war over the face of France; such men headed the bands of country people, and instructed them in martial ways. Pillage, fire, and massacre abounded; the revolt extended to Bordeaux, which became the headquarters of the disaffected. The garrison of Château Trompette endeavoured to subdue Bordeaux; that was repulsed, and the commander, Tristan de Morienne, king's lieutenant in Navarre, coming out imprudently to address the people, was seized by them, killed, mutilated, and buried. His body before burial had been first powdered over with salt, in order that by some act, however rude and clumsy of invention, the people might connect this victim of their fury with a sign of their fierce hate for the gabelle.

The king was at that time with his troops in Italy, but he sent letters patent, promising that justice should be done, and these appeased the people. Justice was done, for the parliament immediately erected gibbets and wheels, on which they hung or broke the bodies of those ring-leaders who were not sent to the galleys. La Vergne, a citizen, who had been first to sound the tocsin, was torn asunder by four horses. While this was being done, two bodies of troops sent by the king were on their way to complete the act of justice. One body was under the Duke d'Aumâle, the other was under Constable Montmorenci. The duke traversed Saintonge, Poitou, Aunis, &c., restoring order with the aid of few acts of severity. The constable marched upon Bordeaux to be revenged for the outrage on Tristan de Morienne.

The keys of the town of Bordeaux Montmorenci disdained to accept, and with drums beating, cannons rolling, lances pointed, and flags flying, he marched his troops into the town as a triumphant enemy. The people were

disarmed, a grim tribunal was appointed, and the great square was crowded with scaffolding and gibbets. A hundred citizens were promptly sent to die upon them. Two leaders of the people were broken on the wheel, one of them wearing at the same time on his head a red-hot crown. The town was declared guilty of felony, and deprived of all its bells. The parliament, because it had been tardy in its effort to allay the tumult, was suppressed. The magnates of the town were sent to dig up with their nails the body of Tristan de Morienne. They were then ordered to carry it before the windows of the constable, and go down on their knees with it, beseeching pardon for the deed that had been done. After this they carried in their hands the putrefying corpse to the cathedral, where they buried it beside the choir. Finally, they paid two hundred thousand livres for the expenses incurred in giving them their punishment. It was ordered also that the town-hall from which Tristan stepped out to be murdered should be razed to the ground, and that in a chapel built over its site prayers should be offered every day for Tristan's soul. This, however, was not done, and all the other penalties incurred by Bordeaux were remitted during the succeeding year ; only a few minor privileges remained lost for ever to its parliament.

From Bordeaux Montmorenci went through the other disturbed districts, Saintonge among the rest, and wherever he went he built and furnished gibbets. This having been done, the king allowed the people to buy off their salt-tax at the price of two hundred thousand gold dollars, in addition to the cost of paying all the officers. That arrangement suited the king very well, for he was at all times prompt to turn the crown revenues into capital, and so consume them, without any care for what might be the income left to his successors.

During the year 1551, Henry II. was taking a very bold position of hostility towards the Pope, and fearing much lest this might give a false encouragement to heretics, he supplied them with the edict of Chateaubriant by way of counter-demonstration. This edict aggravated former penalties. It forbade all presentation of petitions for the aid of heretics, all refuge to them ; it offered rewards to their denouncers, and confiscated their goods when they went into exile. Public men, on their appoint-

ment to an office, or otherwise when called upon, were obliged to exhibit a certificate of orthodoxy ; and active inquisition into private opinion, with a view to the discovery of heretics, was recommended.

It should be remembered that this edict was in force, and this was the temper of the state, when Bernard Palissy besieged in their houses, with a bold expostulation, six of the chief men of Saintes, by whom his avowed friend and fellow-heretic, Philebert Hamelin, was held for death.

But as these judges leniently shut their ears to the rash words of Palissy, and kindly answered him ; so also in many parts of France men had not heart to act up fully to the fiercest spirit of the law. The heretics grew stronger ; heresy tainted a large part of the Montmorenci faction ; the religious struggle heightened court disputes, and in the camp the soldiers often were prepared to come to blows together, because some were orthodox and some were not. Therefore it was thought necessary that the law should be more severe.

Rome had named an inquisitor for France. To him the bishops made objection ; they said it sufficed that there should be given to them absolute power to condemn heretics, and that the heretics should have no right of appeal. To this the council of the king agreed, and the arrangement was submitted to the consent of the parliament of Paris. The parliament denied consent, and through the advocate-general, Séguier, they made the king's blood tingle with a noble speech. "If heresy was to be suppressed," said Séguier, whose name is very honourable for the bold utterance more than once at this period of manly feelings—"if heresy was to be suppressed, let pastors be compelled to labour among their flocks. Commence, sire," said he, "with giving an edict to the nation which will not cover your kingdom with scaffolds, which will not be moistened with the blood or tears of faithful subjects. Distant, sire, from your presence, bent under the weight of labour in the fields, or absorbed in the exercise of arts and trades, they know not what is now being designed against them. It is for them, it is in their name, that the parliament addresses to you its most humble remonstrance and its ardent supplication." The bold orator then turned upon the coun-

sellors with a stern apostrophe, reminding them of the uncertain future of all subjects who were high in power. Montmorenci could provide a comment from his past experience, the Duke of Guise looked his sternest ; but Séguier spoke to good purpose, for the opposition of the parliament caused the new project to be set aside.

To provide the better justice for his people, or more offices for the friends of the friends of his courtiers, Henry II. greatly increased the number of lawyers and other officers throughout France. He established, under the name of Presidial Courts, a fresh spider's web over the country, for the catching of his subject-flies, and for the fattening upon them of such spiders as might have a friend at court. His abuse of the crown revenues I have mentioned. He was reckless in expenditure. He gave the seigneurie of Ganat, in the Bourbonnais, to a fiddler named Lambert, as a marriage-gift, upon his leading to the altar nobody knows whom. The parliament reminded him through their mouthpiece, the honest Séguier, that he had only usufruct of crown revenues, and that if he must needs be wasteful he should waste his own money and not that which appertained to his successors. Henry listened, smiled assent, and went on as before. The disorder and lewdness that prevailed in his court were revealed about this time in a suit for what we should call "Breach of Promise of Marriage," by one Demoiselle de Rohan against the Duke of Nemours. Most of the chief men about the king were witnesses, and their evidence supplies a filthy picture of the court of France during that time.

In the year 1557 Montmorenci was captured by the Spaniards in an endeavour to relieve his nephew, Coligny, shut up in St. Quintin. This is the latest date we have at present reached in any section of our narrative. It is the date of the completion of Bernard's fifteen or sixteen years of apprenticeship in pottery. Montmorenci being absent in the power of the enemy, the Duke of Guise, after his great exploit, the capture of Calais, was at court improving the occasion. In spite of the stern look, which the weak spirit of Henry feared, Guise, who was certainly a gallant soldier, was a handsome man of polished manners, who could be agreeably persuasive when he pleased. When Montmorenci heard through attentive

spies how cleverly his rival was at work, he obtained leave on parole to visit the French court, and betook himself, in 1558, to Paris—he was then a man sixty-five years old—to watch over his own interests. He was at first coldly received, but soon regained his old ascendancy.

In the meantime, Calvinism—heresy—was spreading, and already numbered many great men in its ranks. Among these men were Admiral Coligny and his brother D'Andelot, colonel-general of French infantry. These were two nephews of the constable, and Cardinal Guise (Lorraine) resolved to strike at Montmorenci, and to wound the adverse faction by a blow aimed against them. He denounced them as heretics, and they were summoned to reply. D'Andelot boldly came, acknowledging and justifying his opinions, while he attacked the abuses in the Church with a freedom that incensed the king. D'Andelot, therefore, was imprisoned, and his office of colonel-general was given to a soldier whom we knew in his youth, and who has since been rising in the world—Blaise de Montluc. Persuaded by his friends, D'Andelot consented to go through the form of hearing a mass, and was set free; but he could not forgive himself for having in that way obtained his freedom.

The brothers Coligny and D'Andelot thus came to be regarded as their chiefs by the great body of heretics in France, who admired their austere habits, honoured the sacrifice by them of worldly power and profit which the adoption of Calvinism had involved. The orthodox were proud of a defender like the Duke of Guise, the defender of Metz, the captor of Calais, a military genius, a man brave, eloquent, and liberal in gifts.

Montmorenci, having regained his influence at court, went back to Spain obedient to his parole. He had regained his influence very completely. The Guise party, having formed a coalition with the party of Queen Catherine de Medicis, had left the king's mistress anxious to retaliate upon them by forming a close alliance with the constable. Montmorenci, with Diana of Poitiers, gained not only the extension of his faction, but the completest hold upon the king. Diana and Montmorenci were the woman and the man who influenced King Henry most, who were his nearest friends, and when they ceased from rivalry and worked together with a common purpose,

they were themselves the king. So thorough was the influence thus exercised, that after the constable's return to Spain, the king, enrolled among the number of his meanest spies, listened for court-tattle to report, watched all the tactics and manœuvres of the Guise faction, and sent details of them to the great head of the rival party. In this work of course Diana helped, and manuscripts remain to us containing information of this kind, written in one place by the king, in another by his mistress—one continuing the letter of the other, and the other then resuming—with the signature of both affixed as your old, best friends, Diana and Henry : “ Vos anciens et meilleurs amis, Diane et Henri.”

A conference having been appointed in 1558, for the discussion of some terms of peace, Montmorenci was sent by Spain to the meeting. King Henry, seeing him approach, ran forward and hung upon his neck ; kept the constable in his tent, and caused him to share his bed till he returned again. Soon afterwards the constable was ransomed, and laboured so industriously to bring about a peace, that in the year 1559, the war in Italy, which had endured then for six-and-seventy years, was ended. For the peace the constable received no benediction from the Duke of Guise, whose glory was in war, or from the people ; it was termed the “ Unfortunate Peace,” because it was obtained by yielding up all that had been filched in seventy-six years of disastrous contest. The contention ceased by a surrender of the bone.

I know no words that can depict the wretched state of the French people at this time. Incessant war had taken brave young men out of the fields, and left thousands of them dead on a foreign soil, or returned them to the country men of debauched life, bullies, cripples. The immense cost of these wars had been defrayed by oppressive taxes, recklessly imagined, cruelly enforced. The lust and luxury of a debased court had grown fat for years upon the money of the poor. Almost every year saw the creation of new salaried officials, whom the people had to carry on their backs, and pay besides for doing them the honour to be burdens. The morals of the people were perverted, they were impoverished, embittered, made litigious, and devoured by lawyers before judges, of whom scarcely one in ten was unassailable by bribe

The Church was a machine for burning heretics and raising tithes. Against the debasing influence of a corrupt court, which extended among all ranks of the nobility, and through them was displayed before the ignorant among their fields—against the vice bred in the camp and dispersed along the march of armies, or brought home by thousands of disbanded soldiers—the Church, as a whole, made not one effort to established Christian discipline. Pastors laboured only at the shearing of their flocks; bishops received in idle and luxurious abodes their own large portion of the wool. Instead of dwelling in their bishoprics, and struggling for the cause of Christ, no less than forty of these bishops were at this time in Paris, holding their mouths open like dogs for bits of meat, and struggling for the cause of Guise or Montmorenci.

The heretics grew bold, and made a demonstration in the *Pré aux Clercs*. The king grew more embittered against them, and on the 1st June, 1559, he played off a sly trick at a meeting of a council called the *Mercuriale*, by inducing all the members to speak their minds about the demonstration, and then causing the arrest of those who spoke with any leaning towards its promoters. He then bethought himself of some new measure of severity; but on the 28th of the same month a lance went through his skull while he was jousting at a tournament—being strong-fisted, he was glad to show his skill—and so King Henry died at the age of forty-one, leaving Catherine de Medicis a widow. She was a good-looking widow of forty, with three daughters and four sons. Her eldest son, a lad of fifteen or sixteen, on the 10th of July, 1559, became, while yet under his mother's tutelage, King Francis II.

There remain to us specimens of a beautiful kind of pottery which was made in France, under the patronage of Henry II. and Diana of Poitiers, while Palissy was maturing his discovery. This ware is called *Fayence of Henry II.*, sometimes *Fayence of Diana of Poitiers*; it differs from Palissy-ware altogether, but is quite as beautiful, and is the earliest fine fabric of the kind known to have been made in France. Where it was made, or by whom, are questions that remain unanswered; probably by Italian artists, perhaps by descendants of Luca della

Robbia, several of whose family exercised his arts in France. The fayence of Henry II. is of hard paste—that used by Palissy is soft. This fayence is made of a true pipeclay, very fine and white, so that it does not require any enamel, and the ornaments upon its surface are covered only with a thin, transparent, yellowish varnish. The ornaments themselves are engraved patterns, of which all the grooves are filled with coloured paste, so that there results a smooth surface, of which the decoration is a fine inlaying. Of these inlaid ornaments, yellow-ochre is a prevailing colour, and the style is somewhat Moorish. In addition, however, to the inlaid patterns, the fayence of Henry II. is adorned with ornaments in bold relief—masks, escutcheons, reptiles, shells, flowers, which are various in colour, black, green, blue, violet, and (rarely) pink. The pieces of this fayence are mostly small and light, and their exquisite workmanship equals the chiselling of famous goldsmiths.

On the early specimens of this kind of fayence the Salamander and other insignia of Francis I. occur; but upon most of the pieces, and upon all the best, are the arms of Henry II., with his device of three crescents, and the initial H., interlaced with the two D.'s of Diana Duchess of Valentinois. The emblems of Diana are as common on the ware as those of her royal chevalier. Her colours as a widow, black and white—which the king wore at tournaments, and in which, therefore, he died—had been created into fashionable colours at the court, and are employed in some of the best pieces of this class of pottery. There occurs also her emblem—the crescent of Diana—which King Henry carved upon his palaces, and even had engraved upon his coins.

This beautiful fayence, which must have been first made at the end of the reign of King Francis I., and the making of which was continued under that of Henry II., then disappears. Its maker, or its makers, died or left the country. It is a pleasant mystery. It heralded the appearance of Palissy-ware, different in its beauty, although not less beautiful. Its maker does not contend with Bernard for applause; he quits the field almost in the same moment that Bernard enters. We hear of him no more, nor is there any ware known that can claim affinity to the fayence of Henry II.

CHAPTER III.

PALISSY PUBLISHES A BOOK

PALISSY published his first book during the first troubles, that is to say, most likely in the year 1557 or 1558, when he was forty-eight or forty-nine years old, and accounted himself to have reached the end of his great period of struggle as a potter. It is to this point that we have now brought the story of his life; and upon the question of the book, therefore—which is, perhaps, a lost book—it becomes necessary for us now to pause.

We may so far forestal our narrative as to say that the only works bearing on their title-page the name of Bernard Palissy, and those on which his reputation as a man of sense and science must depend, were published, the first at Rochelle, in 1563, the second at Paris, in 1580. If the former of these publications were not called by Palissy himself, "this my second book," and if in the latter he had not made distinct and special reference to both the date and the contents of his first work, no known trace would exist in literature to indicate that Palissy had written more than the two books bearing date 1563 and 1580. This fact can be accounted for only by the supposition that the first attempt of Palissy to put his thoughts in print had either no name at all, or only an invented name, upon the title-page.

In the publication of 1580, at the commencement of a treatise on Potable Gold, Palissy thus speaks to his theoretical disciple: "And how is it that you are still cherishing these dreams? Have you not seen a little book which I caused to be printed during the first troubles, by which I have sufficiently proved that gold cannot act as a restorative, but rather as a poison, about which many doctors of medicine, having seen my arguments, were of

my side ; so that a short time since there was a certain physician, doctor, and regent in the faculty of medicine, who, being at Paris in the chair, confirmed my statements, proposing them to his disciples as a doctrine well assured ? If there were only that, it would suffice for the confounding of your arguments."

Acting upon the hint given in this passage, MM. Faujas de St. Fond and Gobet, the editors of the quarto edition of the works of Palissy, in the year 1777, included in their volume a clever dissertation on the Ignorance of Doctors, in which they believed that they had discovered Palissy's first work. In support of their opinion they produce a fair body of argument. I doubt, however, whether they have made out a complete case of affiliation.

Without committing myself to a decision on the question, I shall briefly enable the reader to decide or hesitate for himself, as he may think fit. We can then get from the treatise a few sketches which may or may not be drawn from the originals of Palissy, but which will, in any case, depict an aspect of society from which Bernard had taken views extremely similar.

At Fontenay le Comte, in Poitou, which is a district adjacent to Saintonge, dwelt a physician named Sebastien Colin. This physician had translated Alexander Trallian and other things, had written medically against plagues and fevers and apothecaries. His treatise on apothecaries became popular. It is an old joke to regard the doctor as one of the most fatal of diseases. In the sixteenth century the joke had a good deal of earnest in it. When the doctor falls under a joke, the apothecary falls under a sneer, and an onslaught on apothecaries by a doctor would of course be ably seconded as fun by the surrounding world.

Sebastien Colin's manifesto is entitled, "A Declaration of the Blunders and Tricks of the Apothecaries, very useful and necessary to every one studious and careful of his health, by M^e Lisset Benancio." Lisset Benancio is an exact anagram of the author's name, Sebastien Colin. The publication professes to have been printed at Tours by Mathew Chercelé, but the printer's name is also feigned, and the work probably was printed at Poitiers, like the other writings of the same physician. The tract was frequently reprinted, and has been translated into German

and into Latin. It was reprinted at Lyons "by Michel Joue," in 1557.

This Michel Joue, with his punning motto of, "*Cuncta juvant à Jove*," is, we are told, an imaginary person. The reply to Colin, said to be the work of Palissy, proceeded in the same year from the same imaginary publisher, whom MM. Faujas de St. Fond and Gobet, by a comparison of types, vignettes, tail-pieces, and so forth, identify with Barthelèmi Berton, of Rochelle. It should be observed that the second book of Palissy was printed at Rochelle, the printing-presses of which town were those that were the most conveniently accessible to an inhabitant of Saintes.

Let us now assume for a moment that it was really Palissy who lent his shrewd intelligence to the apothecaries, and retorted in their behalf upon the ignorance of doctors. The act itself appears to be very consistent with his character and habits. He knew well the pretensions of the faculty, and the unsoundness of the little science they possessed; he had some contempt for the belief that knowledge lay in Greek and Latin. He had lost six children, and been so brought into melancholy contact with physicians. As professed men of science, he had sought them in his travels, and must very commonly have found them little worth his search. Since he improved in his art as a potter, and gained more extended patronage, he had again been called upon often to pass far beyond the limits of the town of Saintes. In one of his known works he tells a contemptuous story of a doctor in Poitou, who founded his reputation on trickery connected with a subject which we know Colin to have made one of his strong points, and upon which he wrote a book. If it be Colin to whom Palissy in that passage alludes, it is very certain that Bernard must have looked upon the assaulter of deceit in apothecaries as a man who was himself an arch-deceiver. Colin's pamphlet had attracted a good deal of notice; in it the physician was to be seen thundering down out of his sublime height a storm upon the heads of the apothecaries. It would be quite consistent, therefore, with the mood of Palissy to make a work like this the text for a short exposition of what seemed to him some very gross delusions prevalent among the doctors of his day.

The reply to Colin, which has been supposed to constitute the maiden work of Bernard Palissy, has its title

framed upon that of the attack to which it is intended to reply. It is called "A Declaration of the Blunders and Ignorances of the Doctors, a work very useful and profitable to every one studious and careful of his health, composed by Pierre Braillier, trading apothecary of Lyon, in answer to Lisset Benancio, physician." It professes to be published at Lyon, by Michel Joue. It is dedicated to the Seigneur de Boissi, in an epistle dated from Lyon, on the 1st of January 1557. That means, in our present language, January, 1558, since January was at that time reckoned one of the last months of the old year, and not the first month of the new.

It is necessary to state that this quarrel between doctor and apothecary produced another crop of fruit in the succeeding year. Jean Surrelh, a physician, published a tract, also at Lyon, in May, 1558, which was opposed equally to the productions of Colin and Pierre Braillier.

Soon afterwards Pierre Brallier, either the former writer or some other who assumed that name, re-entered the lists with a violent attack against Surrelh, whose antecedents laid him very open to annoying personalities. This Brallier called himself scholar of the college of M. Jean de Canapes, one of the most celebrated physicians of Lyon. It will be observed that the second Braillier retains the sound of the old name, but makes a variation in the spelling. Much stress cannot be laid upon this fact, but it assists to some extent in confirmation of a belief that the two publications were not written by one author. It is quite certain that if they were that author could not have been Bernard Palissy.

It is suggested by MM. Faujas de St. Fond and Gobet, that as the author of the attack upon apothecaries, printed at Poitiers, had affected for disguise to publish his book at Tours, so Palissy, having transformed himself for convenience both of disguise and satire into an apothecary, dated his book from Lyon. It is suggested that the initials of Pierre Braillier, "P. B.," are, when inverted "B. P.," and so stand for Bernard Palissy; perhaps it would be an almost equally valuable coincidence to observe that neither of the names contains an "x."

The main reason, however, for assigning to Palissy the authorship of the treatise in question, arises from the fact that it is the only publication, anonymous or pseudony-

mous, which has been found answering at all to the account given by Bernard himself of his first work. A work was wanted written during the first troubles, that is to say, in or very near the year 1558, manifesting an enlightened spirit, having its author's name unknown—unless, indeed it had upon its title-page the name of Palissy—and containing arguments against belief in the efficacy as a medicine of metallic gold. After a diligent search, no other treatise against this use of gold, written in French, and answering to the required description, could be found to have been published between the years 1540 and 1560. Nothing presented itself but this “Dissertation upon Doctors.” It is declared by the discoverers, that not only in opinion, but also in style, the treatise thus suggesting itself conforms closely to the known writings of Bernard Palissy.

Dismissing from consideration those resemblances which are produced by the common modes of writing proper to the age, one cannot but think the identity of style between the work assigned to Palissy, and works known to be his extremely doubtful. In his second book, for example, published four or five years after the first, there is a quaint habit, evident on almost every page, of carrying a sentence on by the use of such phrases as “le dit,” “audit,” &c. Thus Palissy tells us, that, while labouring at the enamels, “I was so wasted in my person, that there was no form nor prominence of muscle on my arms or legs; also *the said legs* were throughout of one size, so that the garters with which I tied my stockings were at once, when I walked, down upon my heels with the stockings too.” This quaint habit is entirely absent from the “Dissertation upon Doctors.”

It is to be admitted, however, that there occur passages of some length here and there among the works of Palissy wherein the said “sais” do not occur, and the whole style has a good deal of conformity with that of the apothecary’s dissertation. The said dissertation does in clearness of thought, in boldness of opposition to prevailing errors, and in constant production of experience against absurdities of theory, resemble very much the works of Palissy. To its opinions Palissy would have certainly subscribed, and many of them were enforced by him in later writings.

The treatise is not written in the form of dialogue,

and in that respect it differs from all Bernard's other writing.

It ought also to be stubbornly remembered, that Bernard Palissy refers to his first work as "a book by which I have sufficiently proved that gold cannot act as a restorative, but rather as a poison, about which many doctors of medicine, having seen my arguments, were of my side." This being remembered, at the same time it is to be observed, that the "Dissertation upon Doctors" is by no means a treatise specially devoted to the errors touching gold. Errors of this kind are only displayed in it incidentally, among a list of other blunders. The subject of gold occupies, in fact, only two pages out of fifty. In these two pages it is only said, that the author had fed a cock with gold, because a doctor had declared cocks could digest it; that he had found the statement of the doctor false; also, that he had exposed gold to fire for eight-and-forty hours without producing diminution of its substance. Therefore the writer holds that gold could never bedigested, and must act as an impediment only in the stomach. "If I were to say that gold was not restorative," he adds, "that would be false; because through gold one may get capons, partridges, quails, pheasants, and all good things to rejoice and renovate a man; as houses, castles, lands, possessions." No more is propounded on the subject in this treatise. Colin himself, in the Declaration against which it was a counter-manifesto, had written against the medicinal use of gold, and had said more than is here said in condemnation of it. If any merit was due, therefore, to the few paragraphs of Pierre Braillier, a little more than the same merit was due to the preceding paragraphs of Colin. The reference of Palissy to his first work is gravely made, as to a work containing an elaborate argument upon the use of gold in medicine, which had exerted influence upon the minds of some physicians, and had been confirmed by a professor in his chair at Paris. The "Declaration against Doctors," containing no more than had been said just before in the "Declaration against Apothecaries," cannot be said to verify this reference in a convincing manner.

Again, the "Dissertation upon Doctors" contains, as a work of Palissy would contain, scriptural allusions; it was written, very likely, by a member of the Reformed Church.

But it was written with good faith, in the true vein of an offended apothecary fighting for the honour of his order. It may be said that, if so, the cleverness of personation was only so much the more creditable to the wit of Palissy. But it is very questionable indeed whether his deeply religious spirit would have suffered him to carry his humour beyond certain bounds ; I doubt whether Palissy would have written as Pierre Brailhier puts it, of "the state of pharmacy, *to which God has called me.*"

Pierre Brailhier, in his epistle to the reader, begins with a scriptural allusion to forgiveness of injuries, which slides rapidly into recrimination upon doctors who are jealous of apothecaries. Of all states in the world, he says, that of the apothecary is the worst ; he is the worst paid, made the most servile, and the least esteemed of men. He does not wonder that apothecaries combine other occupations with their calling ; for their own is so much trampled down by surgeons and physicians, that patients expect to be attended by them for the honour's sake : "Saying (when they are healed) what did you send me ? herbs ; and that is how the poor apothecaries come to be paid."

"As for the physician, he is paid upon the spot ; or if he be not paid he will not return to a place, though he spends nothing but his trouble there ; and the apothecary spends much more trouble than the doctor, for he must apply all blisters, clysters, and the like, supply the use of his drugs, his time, his servants, and sometimes get nothing at all, losing his time, his trouble, and his drugs.

. . . . It is well of Lisset to say that the apothecaries sell the virtues of drugs and plants which God has supplied to us gratis, without cultivating them, which they ought not to do, and tell us that it is a great sin against God. I would beg him to take the trouble, he and his friends, to go and look for herbs, flowers, roots and seeds, gums, fruits, &c., and conserve and store them with great care and diligence, pay house-rents, wages, and keep of servants, buy the drugs that come from distant lands for large sums of ready money, and then supply them gratis. How would they sell their drugs for nothing, when they will not even furnish a simple visit without being paid, and sell their presence and their words. Yet their visit and prescription sometimes do more harm than good.

. . . . I leave you to judge, when they have con-

science to take a dollar for feeling a pulse and ordering a simple julep, while the apothecary shall find trouble to get paid two sols, which is the greater thief, apothecary or physician?"

Pierre Braillier reasons here like an apothecary of the good old times. Let us, however, call to mind the doctor a hundred years after the publication of this treatise, as he appeared, and deserved to appear, in the works of Molière. Pierre Braillier had vulnerable matter to attack. In our own day, what is called address will assist much more than intellectual ability in the creation of a thriving practice. In the time of Palissy, Pierre Braillier writes of the physicians—"I think that they have studied mumming more than medicine; it is in that, at any rate, that they are wisest; and they might more fairly call themselves incorporated mummers than physicians, for it is the chief perfection that they have."

Pierre then dwells upon doctors who cannot cure themselves, and upon doctors who prescribe absurdly, so that it is necessary for apothecaries quietly to rectify their blunders. He then turns specially to Lisset Benancio, and ends his preface with this paragraph: "Here are not blamed the learned and the wise, and not to be prolix, I will pray to God very heartily that He will give us grace so well to exercise our estates and vocations into which it has pleased Him to call us, that it may be to His praise and glory, so that we may have no just occasion to blame and abuse each other, to the great prejudice and debasement of our professions."

The "Declaration of the Blundering and Ignorance of Doctors" then begins in a religious, philosophic tone. Presently it defines the doctor's duty. "In the first place, the doctor should consider, before prescribing, the acrimony of the disease, its strength, the strength and age of the affected person, his temperature and habit, the quality and temperature of the existing season; then he should know and recollect the virtue and properties of the medicament with which he designs to heal; and all this having been well considered and recollected, he has still many difficulties to encounter, and sometimes cannot effect his purpose." This being defined to be the physician's duty, he proceeds with much shrewd sense, and a little acrimony, through a catalogue of the physician's blunders.

"Do you not think," he says, "that it is a great blunder on the part of doctors to keep an unhappy patient shut up in a room, the windows close, the bed close, and forbid any one to give him air? When already the poor patient cannot get his breath by reason of his malady, except with a great deal of trouble, you cause him to be furthermore shut up and smothered. See how you blunder; first you rob him of his breath, and render him more melancholy than he would be made by his disease, through the foul odours which cannot escape, which pierce his brain and aggravate his illness; and if you grant to me that air aids the expulsive virtue, and that no animals having lungs can live without air, then man, however whole and cheerful he may be, cannot live without air, still less can he do so when he is sick; wherefore I say that you blunder in forbidding air to patients when it is good, and not too cold, or moist, or windy. . . . I should like to ask whether if you were shut up alone for six days in a chamber without air, you sound and not sick (as you shut up your patients), whether you would find it a good thing, and whether you could live as you now do."

Although the writer was, of course, like all the men of his day, ignorant of the real use of air to animals, and accounted for its obvious necessity upon a theory belonging to the physiology of his own time, yet it is worthy of remark, that, in spite of our own better science, there are doctors enough in the present day who take great care to keep the sun and air out of a sick-room, and make of it a place in which they could not themselves live without decided injury to health.

The writer then combats the cruel and fatal practice of forbidding any drink to persons suffering with fevers. Then he passes on to other matters.

"How many times," says Pierre Braillier—and if Pierre be really Palissy his thoughts are prompted by the recollection of dead children of his own—"how many times have I been in company with the physician seeing patients of an evening, when he has said to the parents—'The child will do well, and certainly will soon recover;' and in the morning we have found it dead upon the table. Several times that has happened with physicians who were in the best repute, at which I have been astonished greatly. And if an apothecary dresses a poor man's wound without their

ordering, he will be blamed for it ; and if the patient die, people will say, 'The apothecary has killed him by his ignorance ;' why do they never say the same of doctors when their patients die under their hands ?"

The next attack is on a blunder of which the medical profession is only freeing itself in our own day, the belief that there is wisdom in a long prescription. The long prescription of three centuries ago, arranged after an orthodox sentiment in triacles, was, of course, eminently open to attack ; but I suspect that at this day there is many an old physician, surgeon, or apothecary, who might adopt with advantage to his patients the good doctrine of Pierre Braillier. Whether "P. B." be Bernard Palissy or not, I will not venture to determine ; but it may be seen that his shrewd sense has a Palissian character. "Our Master Lisset," he says, "blames us, saying that we cause many drugs to be used by the sick, in order that we may get more money ; it is very much the contrary, for the sensible apothecary will take heed how he gives to the sick anything about which he is not assured by experience, and of which he does not clearly know the properties. He will not be like many doctors who prescribe confusing recipes, that is to say, great triacles, a quantity of drugs, to make believe that they are very wise, where two or three things, having good relation to the malady, would be of more use than all the triacles. If anybody would examine the physician who prescribes them, he would find him pretty well puzzled to explain the use of half, and would find his prescription an inextricable knot ; for it is impossible that so many drugs can produce one action favourable to the malady without setting up another which is hurtful or obstructive, and which may have some occult virtue that is out of place. Therefore I hold that practitioner to be wise who combines into one prescription few medicaments."

Discussing also other matters, such as distillations and essentials oils, with equal good sense, Pierre comes to the use of gold in medicine, which he dismisses with the arguments we have already seen. From gold he passes to electuaries of pounded glass, to the use in medicine of sapphires, rubies, emeralds, and laughs at coral dust ointment as it used then to be applied over the region of the stomach.

The patients of those days really have to be admired for not rising in general rebellion against the faculty. They were denied drink when they were thirsty, and when they were hungry were denied young capons, and directed to eat only the oldest cocks and hens. Young meat was forbidden; old and tough meat was the diet of the sick. As they, moreover, paid a heavy price for drinking gold and rubies, when they could afford such costly dirt—for in the mouth they were precisely dirt—sickness must have been, more than it is now, a thing to dread. Pierre Braillier defends the wholesomeness of a young capon fat and tender, and argues against the theory by which an old hen is pronounced to be a “warmer diet.” He then proceeds to demonstrate the folly of giving distilled meat to the patients. There was a plan of putting a fowl, partridge, or quail, with marrow, and a quantity of water, into an alembic, and then distilling. The fowl of course boiled, but only the pure water evaporated and distilled over into the receiver, where it was caught as the distilled essence of quail or partridge, to be prescribed to the sick in measured quantities as a nutritious food.

Pierre Braillier dwells with not less sense upon other matters, and manifests a correct knowledge of the *materia medica* of his own day, with sounder views upon it than were often to be met with in the sixteenth century. He says: “I hope, with time, to write of medicaments, as well as of distillation, more amply;” a promise which Palissy would scarcely have thrown in for the sake of strengthening the impression that the book was written by a real apothecary. Upon the preference of Greek and Latin, Pierre writes as Bernard might have written. “Lisset says that the apothecaries are no grammarians, and that therefore medicine is in great danger. I can find apothecaries who will talk physic in French, that many a physician shall not know how to answer in Latin. It is easier for every man to study in his mother-tongue, than to borrow of strangers languages to study in.

“Galen wrote in his own language, and has not borrowed a tongue of any other country for the writing of his books; so also Hippocrates and Avicenna, each wrote and studied in his own language. The apothecaries of France can study in French, without borrowing either a Latin or a German tongue; for all that concerns pharmacy has

been translated into French, so they can be wise without being grammarians—ay, to be sure, and wiser than the doctors ; for their books are in Greek and Latin, very choice, and half the doctors understand Greek not at all, and Latin hardly ; so they do not comprehend what they are studying, and the poor patients run great risks under their hands, for then at the best they physic us according to the manner of the Greeks and Arabs, and with Greek and Arabian drugs ; but we are neither Greeks nor Arabs, have not the same complexions, are not born or bred in the same climate. It is altogether opposite to ours ; for their country and climate is twice as hot, and their medicaments much stronger and sharper, a great deal more active.”

Of this declaration of the blunders of the doctors we need say no more. We have obtained from it some curious illustrations of another aspect of society in France during the life of Palissy ; but we probably quit it with the impression that it was in simple truth the work of an apothecary, who proved himself well fitted to stand forward as the champion of his order.

If we reject the suggestion made by MM. Faujas de St. Fond and Gobet—upon the credit of whose assurance this treatise upon doctors finds its way into encyclopædias as first in the enumeration of the works of Palissy—if we reject this suggestion, there exists no other at present to supply its place. We must content ourselves with knowing, that in or about the year 1558, when Palissy was forty-nine years old, he published his first work. That in this work he reasoned against the use of gold in medicine, and employed arguments which attracted some attention from enlightened men. Finally, that the first work of Palissy is a lost work ; and that we have yet to hope for its discovery among the dusty pamphlets stored up in old libraries. Certainly, whenever it shall be discovered, its dry skin will be found to cover sound muscle and sinew, bone and marrow, a heart throbbing warmly with rich, healthy blood, and brains astir with vigour and vivacity.

CHAPTER IV.

PALISSY IN SUNSHINE, AND FRANCE UNDER A CLOUD.

WHATEVER ignorance was manifested in the treatment of sick bodies during that portion of the miserable old times in France with which we are concerned, the treatment of a sick state by its politicians was no less to be declared against. If doctors hungered after dollars, and dwelt upon the fee as the grand aim of a prescription, kings and princes were no less rapacious, and the profit at which laws and edicts aimed when they were put forth nominally for the nation's good, was the profit of a man or party. The people of France entered only then into the calculation of their rulers when they made a declaration against blunders, and shaped their arguments in some form of revolt.

In our own time and country there are only a few men whose lives we are unable to narrate without especial reference to state affairs. In France, during the sixteenth century, there did not live a clown, perhaps, the current of whose life was not distressed and troubled by the course of state affairs, who had not been, or was not yet destined to be, at some time of his life heavily bruised by a hard-fisted government. There is a blow at hand for Bernard Palissy, and we must now, therefore, pursue the narrative of court intrigue and national misfortune.

Palissy had prospered in his art, and had fulfilled his utmost expectations of success. His beautiful designs in pottery, completed with much labour, and sold at a price which only the rich could pay, presented a new luxury to the great people of his neighbourhood.

Antoine, Sire de Pons, and his wife Anne de Parthenay, were among his most active and important patrons. Pons is a small town of Saintonge, situate in a network of meadows and brooks formed by the windings and branch-

ings of the little river Seugne. On the top of a small hill in the centre of the town was the fortress of its powerful seigneurs, an enormous dungeon-keep. The Sires de Pons ranked with the most ancient barons of the kingdom, possessed two hundred and fifty fiefs, with jurisdiction that extended over a hundred and two parishes. Antoine, the patron of Palissy, was versed in the Scriptures, and zealous for the instruction of his vassals. He led many to the Reformed faith, who suffered through him afterwards, when he himself changed his opinions after the death of his excellent and famous wife, Anne de Parthenay. That lady was the daughter of the Seigneur de Soubise and of Michelle de Saubonne, who had been governess to Renée of France. To her mother's position Anne owed a brilliant education, and she had natural talents by which she was raised to a high rank among the gifted women of her age. She thoroughly understood Latin and Greek, and was a good theologian. She had heard Calvin preach to the daughter of Louis XII. at the court of Ferrara, being there with her husband, the Sire de Pons, and from that date the noble couple were devoted to the propagation of Reformed opinions. These were to Bernard Palissy stout patrons. After the death of Anne de Parthenay, when Antoine de Pons had taken a new wife who influenced him much for evil, and caused him even to become a persecutor of men for heresy which his own lips had taught them, his friendship did not cool towards the skilful artist, Bernard Palissy. His recantation made him powerful. He lived to see most of his vassals become maintainers of the truth he had denied, but he obtained from court numerous favours, and died advanced in years, not only Sire de Pons, but also Count of Marennnes and Seigneur of the Isles of Allevvert and Oléron, first baron and lieutenant-general of Saintonge, captain of the hundred gentlemen of the king's household, and knight of the order of the Holy Ghost.

Another of Bernard's great patrons, at this stage of his career, was Leonor Chabot, the Baron de Jarnac, a gentleman who had ventured before three thousand persons to make public profession of Reformed opinions, and thereafter had removed all images out of his parish church, and boldly sent to court a notification of what he had thought it right so openly to do. The Count de Burie, during

some years lieutenant-general in Saintonge, was another of these noble patrons. Though not of a persecuting temper, De Burie was an ambitious courtier, and oppressed the Church in Saintonge with a view to his own political advancement. The Count de Rochefoucault, one of the most prominent actors in the political events that had Bordeaux and Saintonge for their centre, was a patron of still greater value. Greatest of all was the Constable Montmorenci, who, while filling up seasons of forced leisure in the luxurious employment of his vast wealth, found out the Frenchman who had learned to stamp his genius indelibly on clay, and soon established himself as head patron of Palissy the Potter. Bernard was bidden to employ himself on behalf of the great constable in the adornment of his Château d'Ecouen, about four leagues from Paris. Among all the business that flowed in to keep his furnace active and his wits at work, the decorations of the Château d'Ecouen took the first place.

The Château d'Ecouen, which had been built by the constable, was carefully adorned by him with costly works of art. Much time was occupied by Palissy in the painting and enamelling of decorated tiles which were to pave the galleries and portions of the chapel. The designs were all of subjects taken from the Scriptures, very highly finished, and so well contrived that they gave to the whole pavement a rich effect of beauty that cannot be equalled by the best of Turkey carpets. In one part of the sacristy the Passion of our Lord was represented upon pottery by sixteen pictures, in a single frame, copies from Albert Durer, by the hand of Palissy. The other Scripture pieces were designed by Palissy himself.

Let us now call to mind the picture we have had of the Reformed Church of Saintes in the days of its prosperity, when "you would have seen the daughters and virgins seated by troops in the gardens, and other places, who delighted themselves in the singing of all holy things." Let us think of the good minister, M. de la Boissière, so prosperous that he is no longer obliged for want of table-cloth to lay his dinner on a shirt. Let us think of Bernard Palissy, so well supplied with patronage, that he might be rich if his restless energy were not expending time and toil and money on new efforts to improve his talent. If not rich, Bernard was now, at any rate,

exempted from the cares of poverty. So let us think of him at ease, rejoicing in the religious aspect of his town, frequently travelling abroad to Écouen and elsewhere, as his business required, and coming home to wander thoughtfully and tranquilly among the rocks and fields. While he delighted in the water, earth, and air, he was revolving in his fertile brain quaint schemes which had but small connection with his daily business, revolving also delicate designs, dreaming ideal heads of Christ, and penitents and pharisees. At the same time there were old fables to be thought about—Psyche, Proserpine, the Banquet of the Gods—which were to be painted upon glass for Montmorenci; and there was the rustic grotto for the gardens of Écouen—an ingenious contrivance of his own, of which, “if men inquire into it, they will find that such a work had not before been seen.” Let our thoughts dwell for a short time on Palissy thus cheerfully at work. Having eyes, he saw that clouds were gathering about his country; having ears, he heard the rising of the storm that was hereafter to beat down pitilessly on his head. But let us picture him now with a sunbeam on his face and on his furnace, while the shadow of the storm is out of doors.

The shadow is a dark one. The eldest of the young sons of King Henry the Second and Queen Catherine of Medicis, under the name of Francis the Second, succeeded his father on the 10th of July, 1559. He was then less than sixteen years old, and already a married man. His wife was Mary, Queen of Scots.

During the eleven days of suffering which intervened between the wound received by Henry at the tournament and its result in death, the court factions were all busily at work sorting their cards for the next game. The battle for ascendancy would be between the Guises and the Constable Montmorenci. Montmorenci had lost no time, while the king lay sick to death, in sending couriers out at all hours and in all directions. He gave notice to the princes of the blood, and especially to Antony of Bourbon, King of Navarre, that their affairs were at a crisis, and that they must at once claim their supremacy in the councils of the new king, or the boy would be stolen from them by the Guises.

The Guises, however, happened to be uncles to the

boy's wife, and made themselves a way into his confidence through her. They also took care to propitiate his mother ; for Queen Catherine was now a person to be courted in the state. The Guises won the favour of the queen-mother by sacrificing her antagonists, and chief of all, her rival, Diana of Poitiers. The great men had caressed Diana while she had the means of paying them for their caresses, but when her crescent waned, none scrupled to abandon her. All persons distasteful to Queen Catherine were banished from the court, and forced to leave some portions of their property behind them.

It was to no purpose that Montmorenci sent his couriers out to noblemen and princes of the blood, while his astute rivals had quietly secured their game by the assistance of a pair of women. When the parliament came to salute the new king, after his father's death, he bade them understand that he had requested his good uncles, the Cardinal of Lorraine and the Duke of Guise, to govern his states, and advised the parliament in future to refer to them upon all matters of public business. Montmorenci made an effort to convince the queen-mother of the impropriety of this arrangement, but he wasted his breath upon an angry woman, who reminded him that he had been too friendly with Diana to be any friend of hers. Therefore, Montmorenci took the advice of Master Francis, the young king, and retired to his own domain of Chantilli.

The noblemen and princes of the blood who had been balked in this way came together at the court of Antony of Bourbon, the good-humoured and not at all energetic King of Navarre. They held a meeting at Vendôme, the constable not being there present to the eye, though he had sent his wits thither, and prompted the whole of the proceedings through Dardois, his secretary. It was resolved at this meeting that the Guises had no right to supersede the claims of princes of the blood and ancient officers of state. Resolved also that the King of Navarre should go to court, win over the queen-mother, open the king's eyes, and obtain public office for himself and for his friends. So King Antony went to court, where he was befooled by the Guise party, and whence he was presently sent on a wild-goose chase to Madrid.

The Guises, being now as kings, assumed the pride

belonging to their power. The cardinal especially maintained the reputation of his calling ; and, as Brantôme tells us, "was in his prosperity very insolent and blinded." The duke, being himself a worldly man, felt that he owed to the world courtesy and moderation. Cardinal Charles was quick and clever, with some literary taste. He carried the grave face of a rigid ecclesiastic, while he quietly indulged the passions of a libertine. Duke Francis was a handsome man, with a majestic presence, and an easy, affable address. His pride never degenerated into scornfulness ; he was a brave and skilful general, honest and frank in his dealings, a firm friend, but a remorseless enemy. That last characteristic was shared with him by the cardinal, his brother. But when the duke had satisfied his enmity by seeing an opponent humbled at his feet, it gratified his pride to raise him up again ; the cardinal, when he had a victim prostrate, was impatient for a scalp. War is cruel, Christianity is meek ; so we will endeavour to suppose this the only instance known to the world in which the soldier was less cruel than the priest.

Duke and cardinal took equal pains to strengthen the foundations of their power, by the multiplying of subservient partisans. To surround themselves with a high bulwark of human rottenness, they laboured to corrupt men on all sides, and devote them to their uses by gifts, pensions, benefices, orders of St. Michael. The collar of St. Michael was so much debased in social value by too lavish distribution, that it came at last to be called among the people, with a happy sarcasm, "Every Beast's Collar."

The people did not look with love upon the heads of the Guise faction. It did not please the people that the duke should heap on his own head the honour of an office snatched from Montmorenci, that of grand-master of the house to the king. Still less did it please them that the same brave duke, after inducing Admiral Coligny to resign the government of Picardy, under the belief that he was doing so in favour of the Prince of Condé, should have bestowed that dignity on one of the hungry dogs that fawned on him for morsels—one of his creatures, Brissac.

But if men shook their heads in talking of the duke, they ground their teeth over the doings of the cardinal.

The cardinal took care of the finance, and had found many retrenchments necessary. King Henry had left money matters in a state of terrible confusion. Then there came to the new court, when it was at Fontainebleau, a number of men petitioning for payment of contracted debts, or for arrears of neglected salary, or asking indemnity for loss sustained by the new minister's reforms in the exchequer. The Court at Fontainebleau was, in fact, beset by duns. The cardinal therefore built a gibbet near the palace, and proclaimed by sound of trumpet that all men who had come to Fontainebleau to ask for anything were to depart within four-and-twenty hours, on penalty of being hung. That measure, of course got rid of the petitioners, but they did not go back to their homes blessing the cardinal, or spread content by the roadside on their homeward journeys.

It has been said, that in the last month of the reign of Henry II., certain councillors were tricked into a free expression of unorthodox sympathy, and then arrested. Against these men, five in number, the Guises set on foot the prosecution which had been delayed a little by King Henry's death. One of them, Anne du Bourg, a deacon, was eventually hung and burnt. From that time there was a cry given to political malcontents, to the oppressed people, the party of the princes of the blood, and Montmorenci. To secure the alliance of the large body of Calvinists, Montmorenci and his friends, who had, moreover, other claims to Calvinistic sympathy, had only to dwell upon the persecuting spirit of the Guises. The retainers of the house of Guise, on the other hand, sought friends by pointing to the rigid orthodoxy of the cardinal, and so endeavoured to swell the ranks of a court faction by identifying it with the welfare of the dominant form of religion. The Guises carefully stirred up religious zeal, and encouraged orthodox processions in the streets, intended to annoy the Calvinists, which commonly resulted in the mobbing of some Huguenot who had refused to take part in the sacred demonstration.

Whoever might head the great party of malcontents, created by what was called the usurpation of power by the House of Guise, the men to whom the Huguenots looked up as their own chiefs were the three brothers Coligny, D'Andelot, and Châtillon. Of Coligny and D'Andelot we

have already spoken. Admiral Coligny was a man stubborn, taciturn, and inflexible of purpose ; D'Andelot was not less steadfast and intrepid, and only a few degrees less sombre and reserved. "Both," says Brantôme, "being so formed by nature that they moved with difficulty, and on their faces never any sudden change of countenance betrayed their thoughts." Very useful to them, therefore, was the alliance of their brother, who possessed by nature a more pliable surface to his character, and had increased its elasticity by education. This brother, Cardinal de Châtillon, Bishop of Beauvais, had a mild, engaging way, and so much tact in addressing those with whom he had to deal, that he knew how to avoid all those disagreeable collisions of opinion which would have checked the course of his more hard-minded associates. When negotiation was required, therefore, Châtillon, with his insinuating, courtly habits, proved a most efficient helper to his party.

At La Ferté, on the frontier of Picardy, the malcontents assembled at a château belonging to the Prince of Condé, who was a Bourbon, brother to Antony, King of Navarre. The Prince de Condé was a man given to ease and pleasure, who did not keep one mistress the less for having adopted the reformed opinions in religion. At this meeting, Coligny showed that there were in France two millions of Reformers capable of bearing arms. It was resolved to strike a great and final blow at the dominant Guise faction. Troops were to be levied secretly throughout France, captains were to be appointed over them, and they were to be brought quietly from all parts to concentrate at Blois, for there the king would rusticate in the succeeding spring, and endeavour to recruit his feeble health. The exact service to be done by them, and their precise destination, were to be kept secret from the troops ; but Calvinists were to be levied on the understanding that they were to strike a sure blow for the freedom of their religion, political malcontents were to be told that they were to secure the triumph of their party. The real intention was to break out suddenly at Blois with overwhelming force, to drag the Guises—the king's uncles and his chosen though obnoxious ministers—out of the royal presence, to imprison them, and institute against them public prosecution. The princes of the blood and the ancient officials, with Montmorenci of course at their head,

were thus to be placed where they believed they had a right to be, at the head of the state affairs, and the party of the Guises would be most effectually crippled.

This plot—which is called the conspiracy of Amboise—was kept duly secret by its first promoters. None of them would venture to commit himself by assuming the post of leader in an enterprise which, even when seen through the mists of faction in those days of enterprise, could not have appeared very noble to an honest man. An ostensible leader was required, also, who should be notoriously bold and able, while at the same time he was not provided with a set of principles too inconveniently definite. Captains and soldiers were to be tempted out of many regions of opinion, and a leader was required who should be distasteful to none. The required chief was found in a reckless, roving soldier, named La Renaudie, a man sprung from a good house in Perigord. La Renaudie received a detailed plan of the whole enterprise, in which provision had been made beforehand for a long series of contingencies. He was instructed to say that when the time should be ripe, the Prince of Condé would assume the lead of the movement, to which the people were invited. The name of the queen-mother was by some unfairly used as a consenting party to the enterprise, and she, it was said, would certainly never have sanctioned treason. Finally, to prop all sinking consciences, theologians and juriconsults, chosen judiciously, were requested to supply, and did supply, attestations that no law, whether divine or human, would be violated by the proposed move in the game of politics.

La Renaudie wrote to his associates, requesting them to meet him on the 1st of January, in the year 1560, at Nantes. The parliament of Bretagne there held its sittings, and as feasts were also to be held on the occasion of certain weddings among great families of the province, a large collection of conspirators might pass unnoticed in the throng of holiday-folk gathered there together from surrounding districts. At Nantes, on the appointed day, the whole plan was finally arranged, and the 15th of March appointed for the capture of the ministers at Blois. All went well. The Duke and Cardinal of Guise went with the pallid young king to Blois in due time. A throng of people, wholly unobserved by the

Guises, was marching from all corners of France steadily on, prepared to meet each other on the 15th of March. A dim hint of some danger reached the court, and though but slight importance was attached to it, the king was removed by his uncles from Blois to Amboise, a small town, but more easily defensible in case defence at any time should be required. This change did not much disconcert La Renaudie.

I need not dwell upon the failure of the scheme. La Renaudie betrayed the secret to a friend—Avenelles—with whom he lodged. Avenelles gave information to the Guises, who heard with consternation of a danger close at hand upon so large a scale. There was time, however, for self-preservation. They succeeded in frustrating the whole design. La Renaudie being killed, was hung upon a gibbet, with a superscription, "Chief of the Rebels." Amnesty, against the will of the Guises, was offered by the Chancellor Olivier to all those misguided men who would return home peaceably, and upon this promise large numbers immediately retired. A party of those who remained having attacked Amboise by night and been repulsed, the Guises became violent in their revenge, and sending in pursuit even of those who had departed on the faith of peaceful promises, committed all to indiscriminate imprisonment and massacre. The Prince of Condé was arrested, but was afterwards set free upon his own denial of complicity. Castelnau, a faithful servant of the state, died on the scaffold. He had quitted the castle he defended to plead before the king his quarrel against the Guises, and to clear himself of treason to his sovereign, at the instance of the Duke de Nemours, and after receiving from the duke a written pledge that he should be suffered to go and return in safety. The Guises, however, arrested their opponent instantly, and the duke in vain implored them to enable him to keep his word. "This," says the Marshal Vieilleville in his "Memoirs," "vexed the duke much, who was concerned only about his signature; for if it had been his mere word, he would have been able to give the lie at any time to any one who might reproach him with it, and that without any exception, for the prince was brave and generous." Such used to be good ethics for a knight in armour.

The immoderate, indiscriminate vengeance taken by the Guises after the failure of this plot heaped up terribly the measure of the public discontent. "I saw Huguenots," Brantôme tells us, "who said, 'Yesterday we had no part in the conspiracy, and would not have approved of it for all the gold in the world ; but to-day we will own it for a dollar, and say that the enterprise was good and pious.'"

The Constable Montmorenci was maliciously selected by the Guises as the narrator to the parliament of Paris of the failure of a scheme in which many of his own adherents had been implicated. He was then sixty-seven years of age, an old man, not yet feeble ; and to the disappointment of his political opponents, he fulfilled his mission in a most becoming way. He simply narrated the facts, abstained from all comment on the conduct of the Guises, confining his expression of opinion to a statement that the conspirators were clearly in the wrong ; for, he said, if a private man is bound to protect friends under his roof, much more is a king bound, under the same circumstances, to protect relations who are at the same time his appointed ministers.

It has been said that the name of the queen-mother was used by certain members of the unsuccessful party. They may not have spoken wholly without grounds in claiming her as an ally. Catherine of Medicis had at that period of her career no settled action ; and as she flattered equally men opposite in party, each might sometimes carry home a tale of favour. She could listen to a tale of grievance, and interject such sympathetic words and syllables as were agreeable to the narrator ; but she had not at that time attached herself as a true partisan to any faction. She was forty-one years old, and still a handsome woman. In the midst of the gloom which overspread society, through all the plots and tumults of which we have just been speaking, the queen-mother held a gay and brilliant court of ladies, who employed themselves in frivolous amusements. She favoured and protected artists, as a matter of elegance and taste rather than principle. At a time when the foulest stratagems were fair in love, she did not vex her ladies by too strict a care about their morals. They all fished and hunted, sang, danced, and embroidered, while the storm of civil war was gathering.

The darkness deepened over France. The Prince of Condé retired to the court of his brother of Navarre. An assembly held at Fontainebleau produced, and was intended to produce, no healthy result. The king, a most pitiable youth of seventeen, desperately sick, entered Orleans in October, to assist at the meeting of the states that was to take place there. Throughout his brief reign he had lived in the wild centre of a contention that he could not understand. Sometimes he drooped, and felt that, young as he was, and little good or harm as he had done yet in his feeble days, all those conspiracies and murmurs of the people, which had their centre in his chamber, could not be directed against him. But he was in the power of his uncles, and with them he entered Orleans, pale and unhappy, surrounded by armed troops, and looking through them at stern, discontented faces on the pavement.

The princes of Bourbon had been bidden to attend at Orleans on this occasion. Charles, Cardinal de Bourbon, had been sent out to reassure them with a message from the queen, declaring that they had no treachery to fear. On the 30th of October, therefore, they entered Orleans. But there was a pitfall laid for them. At the moment of his appearing in the young king's presence, the Prince of Condé was arrested. His papers afterwards were seized, and his accomplices imprisoned. He was destined to be tried by a commission, and not, according the prerogative of his rank, by peers and parliament under the presidency of the king. He asked for counsel to defend him, and his wish was granted, but only in order that the private instructions which he drew out and the information which he gave for use in his defence might be seized and directed against him, as instruments in favour of the prosecution. The King of Navarre pleaded in vain for his brother before the proud Cardinal de Lorraine, the king standing and bare-headed, abjectly pleading before the cardinal ; while the priest, seated and covered, scornfully rejected his petition. His young wife wept in vain before the throne ; the Prince of Condé was found guilty, and condemned to die on the 10th of December, the day on which the states were to be opened.

Several commissioners had already affixed their names

to this decision, when rumours of the rapid waning of the king's life suspended their proceedings. The rumours were well founded. On the 5th of December, 1560, the poor boy—the French monarch—died. A child succeeded him.

CHAPTER V.

THE OUTBREAK OF THE STORM—PALISSY WRECKED.

BERNARD PALISSY, on whom the sun was shining still, continued busy in his workshop. The Reformed religion had gained strength in Saintes, and Palissy was prominent in his own town among its firm and peaceable supporters. He assumed to himself the right of free inquiry, and did not scruple to make bold confession of his faith ; while doing this he quietly pursued his studies in the fields, and laboured in his prosperous vocation as a potter.

In the cabinet of Samuel Veyrel, apothecary of Saintes, a diligent collector of local antiquities, Palissy had found, no doubt, some help towards the formation of his taste ; but he had found most help in the world round about him. The frogs of the marshes, the marine shells scattered upon the coasts of Saintonge, adjacent to his place of labour, were in his eyes more beautiful than any Roman medals dug out of the soil. He reproduced them on his rustic basins—dishes as we call them now. Frequently such a basin is formed by the representation of a little island, upon which are shells and frogs and grass or herbs, about which fishes swim, and with a border of land encompassing the whole, covered with elegant forms of plants and animals ; lizards brilliant with colour seem to be lying torpid on the bank, as when they sun themselves upon their native rocks ; frogs, crabs, beetles, glittering snakes, shells, all objects beautiful in form, and having a colour brilliant or lustrous that can be represented well by an enamel, were the objects most in favour with him, and the living objects certainly most common in Saintonge ; over the flower of a water-plant, a dragon-fly would perhaps glisten ; ferns, polished ivy-leaves, and berries, all the most beautiful forms of the most familiar foliage were

used also in the decoration of these rustic basins ; consideration being always had for the selection of objects that could be imitated closely by the means he had at his disposal. The objects were modelled, in relief, and although rustic basins of this kind were made for many uses, for fruit-dishes, for costly salt-cellar, and so forth, yet it is not to be supposed that they were plates or dishes of our modern sense. Their ordinary use, costly as if formed out of a precious metal, was the adornment of the side-boards of the wealthy, and the contrast of their colours with a background of the brown leather hangings with gilt borders furnishing many walls, is said to have had a most excellent effect.

The colours used by Palissy were few—the golden yellow of the ripening corn, the deep violet blue of distant forests, the intense green of thick pasturage, the rich brown of the earth freshly up-turned by the plough. He went to the nature round about him for the subjects of his *figulines* as for all else. Until he was required late in life to cater for a false Parisian taste, the beggars whom he met upon the road, the village musician with his bagpipes, his patchwork dress, and his red nose, the country-woman with an infant at her breast, the boy stealing new-born pups from their mother, who follows the thief, clinging to the flap of his coat and striving to regain her little ones—such subjects Palissy chose, and in the treatment of them showed how thoroughly their poetry was felt. When several copies were made of the same *figuline*, the artist gave play to his fancy by continually varying the disposition of his colour. One never finds two pieces of his ware alike in form and colour too. When afterwards in Paris he had to satisfy the taste created by artists of the school of Fontainebleau, he embedded the mythology imposed upon him in his love of nature. If he represented Venus and Adonis, they were placed by him in a modelled landscape full of trees, of which the foliage was defined with marvellous exactness, with distant mountains and the sea beyond them, all a masterpiece of colour and perspective.

At this period of his life, while he was still living at Saintes, the chief work upon which Bernard Palissy was engaged had been committed to him, as we have seen already, by the Constable Montmorenci. Perhaps Mont-

morenci had become acquainted with the skill of Palissy when his mission to quell the revolt against the salt-tax had brought him, after punishing the town of Bordeaux, through Saintonge. Perhaps the constable, whose ears were open to all useful hints for the promotion of his famous building works at Ecouen, had heard of Bernard Palissy through courtly friends residing in or near Saintonge, whose homes the potter had already decorated with examples of his skill. The patronage of Montmorenci must have gone far to assist the artist's worldly fortunes. A man who had been entrusted with important charges in the decoration of one of the most famous architectural works of France during his own time, was recommended by his position to a large circle of seigneurs who had castles to build or to improve.

The building of the Château d'Ecouen was commenced as one of the chief amusements of the wealthy constable when he was forced into political inaction by the loss of royal favour. The architect employed upon it was Jean Bullant, who afterwards enjoyed the patronage of Catherine of Medicis, and commenced the building of the Tuileries in conjunction with Philibert de Lorme. In the history of French architecture, the reputation of Jean Bullant is founded principally on the Château d'Ecouen, with which we are now concerned. Bullant, a strict disciple of Vitruvius, had studied in Italy the remains of ancient art, and was among those who introduced into France Greek principles of architecture, which were often at first curiously grafted on the heavy Gothic character that belonged to the buildings of the period then closed. So it happens that the château at Ecouen displays a quaint mixture of old Gothic associations with the doctrine of Vitruvius, and combines classical outlines, Doric, Ionic, and Corinthian, with high roofs and church windows.

The château, distant about four leagues from Paris, overlooks from a hill the little country town of Ecouen. It was built in the quadrangular form, and surrounded on three sides by a moat, in accordance with that fortress style of architecture which had not yet become unsuited to the wants of the French nobility. In its main plan there was much to remind one of the Luxembourg. On the fourth side, overlooking Ecouen, there was, and is, a terrace famous for the pleasant prospect it commands.

The four corners of the building are slightly elevated in the form of towers, having cupola roofs. The château surrounds three sides of the quadrangle within, these being the three sides guarded by the moat. On the fourth side, corresponding to the terrace, the square is completed by a wall, having a plain massive gate, through which a visitor must pass into the quadrangle, before coming to the grand front of the château itself. The entrance to this is quoted among architects for its majestic peristyle, with four Corinthian columns and as many pilasters, as the best specimen remaining of the works of Jean Bullant. The whole style of architecture in the Château d'Ecouen is said to be characterised by that simplicity belonging to a work of genius, which produces in the student's mind, according to its humour at the time, a sense either of elegance or grandeur.

The altar of the chapel at Ecouen, by Bullant himself, is preserved now in a museum. There are carved on it in bas-relief the four Evangelists and the Theologic Virtues; there are also spaces on it, formerly filled by statues of the constable and his wife, Magdalen of Savoy, both chiselled by Prieur. Of the work contributed by Palissy towards the decoration of the building, nothing remains in the present day but the beautiful pavement in the chapel and galleries. Of the history of Psyche, painted on glass by Palissy, after the designs of Raffaelle, and of his large piece from the designs of Albert Durer, there remain only representations on paper.

A brief record of a visit paid to the Château d'Ecouen, not very long after the death of Bernard, supplies to us a few particulars which will assist in defining to our minds the scheme of decoration in which Palissy performed his part. "We saw," says the writer, "a dozen heads and many beautiful figures in marble antiques; there is one of a hero, in white marble, which is excellent; and above all, there are two drooping captives, from the hand of Michael Angelo, which are not finished, but the design of them is marvellous. In the chapel we saw beautiful pictures, and among others a copy of the Last Supper, by Raffaelle d'Urbino, drawn on the piece of Papal tapestry which M. the Constable gave to the late Pope Clement VIII. The court is almost precisely square, forty paces in breadth, and forty-five paces long. The galleries and

the château contain many precious marbles, and of those beautiful articles of pottery invented by Master Bernard of the Tuileries. There are two galleries entirely painted with great skill by one Maestro Nicolo, who had been in the service of the Cardinal de Châtillon. On the glass, the fables that are represented best are that of Proserpine, on one, and that of the Banquet of the Gods ; that of Psyche on the other ; the pavement of these galleries is also the invention of the above-named Master Bernard."

In the peristyle before the chapel was a round table of great size, of black and white stone, polished, full of shells. The château contained works of taste executed in black Egyptian marble, verd antique, and other curious material. The walls of the chapel were adorned with figures of the Apostles in mosaic, and among other pictures, besides that of the Last Supper from Raffaele, was the Woman taken in Adultery, by Jean Bellin. The font was a vase of Italian jasper, on antique bronze feet. The sacristy included among its contents a map of the Crusades, and was paved, as we have seen already, with the exquisite pottery of Palissy, covered with paintings of his own design, on subjects taken from the Scriptures. Of all the windows at Ecouen Bernard Palissy is said to have been the painter. In a grove of the garden there was formerly a fountain called FONTAINE MADAME, to which was attached the rustic grotto of which Palissy speaks always with pride as one of the chief triumphs of his ingenuity. The formation of the fountain, and the arrangements made for its supply, were also most probably suggested by the potter, whose study of nature, as we shall hereafter see, had already by this time led him to discover the true theory of springs, and whose shrewd wit instructed him in many ways by which he could make useful application of his knowledge.

Happily occupied with such work, and declining all part in the turmoil of the day, Palissy prospered still, while France was falling into trouble. Far removed from the old days of solitary struggling, he had now two sons, Mathurin and Nicolas, cheerfully taking their part of the labour in the well-appointed workshop. The trouble of France was being felt at Saintes. The hymns of the triumphant Huguenots, who had reformed the town, had begun already to fall into discord. Many who had put

upon themselves reform as a garment cut to the prevailing fashion, had found the dress not loose enough to suit them, and returned to their old clothes again. Since orthodoxy had endured a summary ejection from the town, it had found time to make a formidable muster of its forces, and a contest was imminent. Still Palissy worked tranquilly at his vocation, exercising, however, openly a right to act on his own convictions, and to speak what he thought to be the truth. He zealously supported the ministry of M. de la Boissière, and he did not spare his censure upon men of the old school, who enjoyed themselves on the revenue of the Church, and took no part in the performance of its duties. "They are accursed, damned, and lost," he used to say. "And I can tell you this with certainty, because it is written in the Prophet Ezekiel, chap. 34; for the prophet says, 'Woe be to you, shepherds, who eat the fat and clothe you with the wool, and leave my flock scattered upon the mountains; I will require it at your hands.'"

The free speaking of Palissy created no good-will towards the honest potter through a large circle of men against whom his shafts were pointed. Any frivolous young noble of the neighbourhood would not much relish the good potter's humour for applying common sense to the details of dress. "'Brother,' Bernard asks of an ideal courtier, 'who has moved you to cut in this way the good cloth you are wearing in your breeches and other habiliments? Do you not know very well that it is a folly?' But this insensate wished to make me believe that breeches so cut would last longer than others, a thing I could not believe. Then I said to him, 'My friend, assure yourself of this, and do not doubt it, that the first man who had holes cut in his breeches was a fool by nature; and though, in general matters, you may be the wisest person in the world, yet in this particular you imitate and follow the example of a fool.' True it is, that a folly transmitted from our ancestors is esteemed wisdom; but for my part, I cannot agree that such a thing is not a direct piece of folly."

So from the highest to the lowest matters, Bernard freely exercised his judgment on the wisdom of his ancestors. He tested by a rule of common sense the absurdities of feminine attire. "'You have got to your-

self,' he tells us in his lively way, after the form of an address to a high dame—'you have got to yourself a farthingale in order to dilate your dress in such a manner, that your garments barely escape exposing what you ought to hide.' After I had made her this remonstrance, instead of thanking me, the silly woman called me Huguenot ; seeing which, I left her."

Of the trader he desires to know what he has put into his pepper, that enables him to buy it in Rochelle at thirty-five sols the pound, and to make a great profit by selling it again in the fair of Niord at seventeen sols, "In consequence of the adulteration added to the said pepper. Then I asked why he was so foolish, and without judgment, as to deceive thus wickedly the customers ; but without any shame, this rascal maintained that the folly of which he was guilty was a piece of wisdom ; and I urged upon him then that he was damning himself, and that he could afford better to be poor than damned ; but this insensate said that poor men were of no esteem, and that he would not be poor, follow what might ; then I was constrained to leave him in his folly."

These and other examples of his style of criticism on the follies and the vices of his time occur in a book published by Palissy immediately after the events narrated in the present chapter. His criticism takes the form of an inspection of different heads, for the purpose of discovering what they contain. "In this way," he says, "I took the head of a presiding judge who called himself good servant to the king ; the same had greatly persecuted certain Christians, and had favoured many wicked men ; and having subjected his head to examination, and separated its parts, I found that there was one part fattened by a morsel of benefice which he possessed ; then I knew directly that this was the reason why he had made war against the Gospel, or against those who desired to lay it open to the light. Seeing which, I left him to his folly, knowing well that I should have no power of argument over him, since his kitchen was fattened with that kind of potage.

"Then I came to examine the head and the whole body of a counsellor of parliament—the slyest fellow one might ever meet with ; and having put his parts into the retort and furnace of examination, I found that he had in

his belly many bits of benefices, which had fattened him so much that he could not confine his belly in his breeches. When I perceived such a thing, I entered into dispute with him." But Palissy adds, when he has made remonstrance against his folly, "I had no sooner finished my discourse, than this foolish and insensate man used all his efforts to put me to shame, and gain a victory upon the proposition that I had maintained; and said to me with a loud voice, 'What, is that your argument? If I were, indeed, a fool for holding benefices, the number of fools would be terribly great.' Then said I to him, quite gently, that all those who drink the milk and wear the wool of the sheep, without providing for their pasture, are accursed; and alleged to him the passage that is written in Jeremiah the Prophet, chapter 34. Then he attempted a bravado, and a marvellously high-flown fury, saying, 'What? According to your account there are a great many whom God has cursed. For I know that in our sovereign court' (of parliament) 'and in all the courts of France, there are few counsellors and presidents who do not possess some morsel of benefice, which helps to support the gildings and accoutrements, banquets and common pleasures of the house, necessary to acquire in time some noble place or office of more honour and authority. Do you call that folly? It is the most consummate wisdom,' said he. 'It is a great folly to let one's self be hung or burnt for the maintenance of the authorities of the Bible. *Item*,' said he, 'I know that there are many great lords in France who take the revenue of benefices; nevertheless, they are no fools, but very wise; for such things help them greatly in the maintenance of their estates, honours, and fat kitchens; and by such means they get good horses for their service during war.'" The war-horse, it will be observed, makes a shrewd climax to the list of worldly goods.

Plain speaking, of the character here indicated, must be added to the list of Bernard's occupations during the period of his prosperity at Saintes. The same originality and force of intellect which procured patrons for the Potter, was serving at the same time to multiply enemies about the austere Reformer, who indulged so freely in the luxury of truth. The affairs of the Potter prospered, and, after all, the wife of Palissy perhaps would

have been well content if pottery had been her only care.

The child who succeeded Francis II. upon the throne of France was six years younger than his predecessor ; he was a little more than ten years old, and Charles IX. was his title. On his accession, the Prince of Condé had one foot upon the scaffold, and the King of Navarre was not many steps therefrom ; they being the two first princes of the royal blood. The old four factions of the time of Henry II. had decomposed by this time into two great parties, and involved in their dispute the passions of the whole French nation. At the head of one party, which included all the Huguenots, were the slighted members of the high French nobility ; at the head of the other party, which included all the Catholics, were the Guises, aliens in blood, who had then their advantage in a tight grasp of the reins of power. The parties to the great dispute upon theology, the Huguenots and Catholics, had been respectively invited to ally themselves to opposite sides in a fierce quarrel among great men for court influence. They fell accordingly into opposing ranks, and with their strong deep passions overwhelmed the mean first cause of the dispute, which rapidly resolved itself into a civil war upon the angriest of topics.

Queen Catherine of Medicis, who, by the elevation of her second son, was now continued in her title of queen-mother, had for a long time been troubled by the clang of parties and the quarrel of court factions for predominance. Wisely advised, she determined, when her boy Francis was released by death from the dominion of the Guises, to preserve her next son, Charles, if possible, and France at the same time, in a more tranquil state. The heads of each faction, even while Francis shifted restlessly upon his death-bed, lavished promises of faithfulness upon the mother, and endeavoured to secure her as a close ally. She repelled neither, she embraced neither, but she reconciled all to herself. The King of Navarre, renouncing his claim to a regency in favour of Catherine, was made lieutenant-general of the kingdom, ostensibly reconciled to the Guises, who continued powerful at court. The Prince of Condé came with honour from his prison. The court smiled upon the discontented nobles, who returned to favour, the great Constable Montmorenci

among the rest. The veteran, when he first knelt before the little king and kissed his hand, was moved to tears. "Sire," he said, "do not fear the present troubles. I will sacrifice my life, and so will all your faithful subjects, for the preservation of your throne."

The constable, according to his conscience, kept his word. Every act tended to conciliation. The policy of the queen-mother prevailed, and the monopoly of power was taken from the Guises. The Bourbon party lost no opportunity of causing their old enemies to feel the change. The Guises maintained a proud front, and as they still enjoyed much manifest favour, complaint grew against them even in their humbler state. At last the King of Navarre, Coligny, D'Andelot, Cardinal Châtillon, and the chief nobility, with Constable Montmorenci to support them, carried the old dispute so far as to call out their horses for a ride to Paris from the court at Fontainebleau, declaring that if the Guises were not banished, they would cause the parliament of Paris to declare Antony, King of Navarre, the regent of the kingdom. At the critical moment Montmorenci was summoned to the presence of the young king, who commanded him to remain about his person. The old constable was not prepared to be disloyal, and remained; his friends, unable to get on without him, sent their horses back into the stables, and all stopped at Fontainebleau to play a round game at negociation.

The object of Queen Catherine was, if possible, to offend neither of the contending parties, and to hold them so well balanced that she might sway either as she pleased, and it was her desire to exert all her influence for the maintenance of peace. The Guises, following their own ends, and not confiding greatly in the queen, allied themselves with the ambassador of Spain, whom Philip II. had sent over to maintain his interests, and who was disposed to meddle actively in the affairs of France. This dangerous alliance boded so much the ascendancy of Catholic intolerance, that Catherine considered it her policy to set the balance right by showing favour to the Calvinists. She carried her tolerance to the point of an apparent preference for the Reformed religion, and in that way very much shocked the orthodox old constable, who bade her pay more pious heed to the appointed fast-days of the Church.

At the same time the parliament of Paris was propounding counsels of political and financial reform. The King of Navarre was to be regent ; the Guises and all priests were to be dismissed from participation in state business. Account was wanted of all gifts made by the late kings to the Guises, to Diana of Poitiers, to the constable, the Marshal St. André, and others.

The Marshal St. André and Diana had aforesaid been very active in procuring the confiscation of property belonging to the Huguenots. They were of course, therefore, fair subjects for retaliation. Uniting their interests in self-defence, they combined to alarm the constable by making him believe that the orthodox religion was to be abolished in the first instance, and after that there was to be confiscation of his property. The old man, possessed with such ideas, was obstinately deaf to the reassurances of his eldest son, the marshal, and of his nephews, the Châtillons ; and making common cause with his old political opponent, the Duke of Guise, and with the Marshal St. André, he formed with them what was entitled a triumvirate. A Catholic league was planned, with Philip of Spain at the head, and plots were laid to win over to the Catholic cause the easy-minded Bourbon of Navarre. His relations with his neighbours of Spain caused that task to seem by no means difficult. The queen endeavoured still to maintain peace ; but, as the chancellor informed the parliament of Paris, "the devil had taken care of the religious contests," and there was no peace to be had.

In July, 1561, the Chancellor L'Hôpital addressed an edict of tolerance to all the presidial courts. Outbreaks of intolerance were the immediate result. In every district where the Huguenots prevailed they triumphed in their privileges ; where the Catholics prevailed the edict was rebelled against. New tactics being requisite, the parliament in the next place decreed that punishment of death should be abolished in the case of those condemned for participating in heretical assemblies. It was ordained also that there should be peace throughout the kingdom, and that no levies should be made without the king's permission. Priests and ministers were respectively commanded to cease from abusive language. Calvinists were not allowed to hold assemblies ; bishops were to

punish heresy, but with no penalty more grave than banishment. The edict was not well observed. The queen's favour enabled the Huguenots to meet even at court, and in some places they wrested even the churches of the orthodox to their own use.

Then there were assemblies. There was the colloquy of Poissy, an elaborate theologic wrangle, held on the 9th of September in the same year. Good never came out of theologic wrangle, whether two men or two hundred were the parties to it; and so no good followed from the colloquy of Poissy. Each side, of course, confidently claimed the victory. To win the pleasure-loving King of Navarre to the side of the catholics it was proposed that he should divorce his old wife Jeanne D'Albret for heresy, and take a new one, Mary Stuart, with the crown of Scotland. The king was not tempted, however, either by Mary on the one hand, or by Margaret of Valois, the king's sister, whom Catherine offered him by way of counter-bribe to Mary. The King of Spain knew better how to bribe, by promising the island of Sardinia, at the same time that Antony was reminded of the subordinate position he would hold among the heretics, who regarded as their leader, not the King of Navarre, but the Prince of Condé. Antony then formed alliance with the Duke of Guise, and openly espoused the faction of the orthodox, celebrating the event with a grand procession.

While these intrigues took place among the leaders, tumults and riots were increasing throughout the country. Queen Catherine and the Chancellor L'Hôpital still laboured to promote peace by edict; and as the last edicts had been unavailing, deputies from all the parliaments, assembled at Saint-Germain in January, 1562, contrived another. Usurped churches were to be restored, and orthodoxy honoured; but the heretics were to be allowed to meet for worship, unarmed, and outside the towns. Their ministers were to abstain from all invective against the ceremonies of the Established Church, but to promote kind feeling to the utmost of their power. In places where the heretics were weak, this edict was rejected; where parties were balanced, the opposition of the orthodox had to be put down by force of arms; in some places, as at Barjols, the heretics displayed that furious and cruel temper which is by no means

the peculiar attribute of any one sect of contending Christians.

The edict of January was attributed by the heretics to the success of their twenty-two representatives—Beza the chief, who answered for the two thousand one hundred and fifty Reformed Churches of France—in the colloquy of Poissy. They thought that all doubts were removed; and in some places, fortified by the edict and the favour of the queen, they shared the temples with the priests, who yielded to them sometimes out of fear, and sometimes half disposed to take part with the ascendant doctrines. As for the king, by whom of course the edict had formally been issued, songs were made in his honour; he was claimed as a Reformer, and significant anagrams were found to be connected with his name, Charles de Valois : *Va chasser l'idole—Chassa leur idole*.

The Guises had at this time quitted the court. The Pope's legate and the Spanish ambassador remaining near the king, worried the queen-mother, who repaid them with cold looks. The King of Navarre, enamoured of a maid of honour, Rouhet de la Béraudière, could not patiently find time to spare for other topics. The veteran Montmorenci and the Marshal St. André seemed to be the only active heads of the great Catholic party; while the Prince of Condé was drilling Huguenots, and Coligny and D'Andelot rejoiced at court in the smiles of Catherine de Medicis.

But the Guises had left the court not to seek rest, but to employ themselves in active preparations for a struggle. The King of Navarre being impatient of the ascendancy obtained by his brother, the Prince of Condé, in Paris, the Duke of Guise was summoned to exert himself. He left Joinville for Paris, with his brother the cardinal and a numerous suite, at the end of February. In passing through Vassy on the frontier of Champagne, his attendants disturbed the service of a Huguenot congregation with disputes that mounted very soon from words to blows, from fists to stones. The duke, coming to calm the riot, was struck with a stone. The flowing of his blood, say Catholic accounts, produced a rage among his people, and resulted in a massacre. Huguenots told that the whole matter was premeditated, and that the townspeople were charged upon to the sound of the duke's trumpets. The duke declared upon his death-bed that the massacre was

accidental, and we take his word, for certainly he was not a dishonourable witness. Three hundred, of every age and either sex, were slaughtered at Vassy. The Huguenots brought their remonstrance to the queen, and were heard with favour ; the King of Navarre, the lieutenant-general, declared them to be factious heretics. The Duke of Guise and Montmorenci at the same time made a triumphal entry into Paris.

The massacre of Vassy was being imitated at Cahors, at Sens, at Auxerre, and at Tours, in which places more than a thousand perished. Three hundred of these were shut up in the house of God to starve for three days before they were taken two by two for slaughter on a river bank. There were little children, who had not been murdered with their parents, sold for a dollar a-piece. There was a beautiful girl killed naked, that vile eyes might contemplate the paling of the skin, and the whole sudden change of beauty to the ghastliness of death. Such cruelties there were that dotted with a deeper black the massacres in Aurillac, Nemours, Grenades, the new town of Avignon, Marsilagues, Senlis, Amiens, Abbeville, Meaux, Châlons, Troye, Bar-sur-Seine, Epernai, Nevers, Châtillon-sur-Loire, Gien, Moulins, Yssoudun, le Mans, Angers, Cran, Blois, Mer, and Poitiers. In all these places, massacres succeeding that of Vassy, preceded the first outbreak of the civil war.

The Prince of Condé, finding it impossible to recover Paris from the hands of the Guises and Montmorenci, their new ally, endeavoured to collect at Meaux all forces that were available for action. He wrote to summon to his aid Coligny and D'Andelot, telling them, in reference to the events at Paris, "Cæsar has not only crossed the Rubicon, but he has taken Rome." Cardinal Châtillon and D'Andelot, with Senlis, Boucard, Bricquemant, and others, were assembled in the dwelling-place of the admiral at Châtillon-sur-Loire. The admiral shrunk from the step which pledged him to a part in civil war, and for two days resisted the arguments of his companions. To the complaints of his wife, however, uttered in the mid-watches of the night (her important curtain-lecture is on record) Coligny yielded. As the *Sieur d'Aubigné* relates, "The persuasions of a well-beloved voice and of a proved faith were so violent that they set the admiral on horseback to

ride in search of the Prince of Condé and his friends at Meaux."

Catherine, fearing violence, carried the king from Monceaux, an undefended country-house, to Melun, and again to Fontainebleau, after having written to call Condé to her aid. The triumvirs, with a troop of cavalry, followed to Fontainebleau, where they told the queen that they required the presence of her son, and that she might accompany him or leave him, as she pleased. Menaces and prayers were in vain, and the queen-mother, clasping the boy in her arms, travelled away among the soldiers. The king, being then taken to Paris, was received with joy, and as the triumvirate now had, at least in a literal sense, the royal countenance, their acts against the Calvinists assumed a more determined character. The constable in Paris, at the head of troops equipped as for a severe campaign, charged into the suburbs among the churches used by heretics, broke open their gates, and dragged their pulpits and their benches out to make great bonfires for the delectation of the people. This exploit amused the wits of Paris, who forthwith honoured Montmorenci with the name of Captain Burn-a-bench (*Le Capitaine Brûle-Bancs*). "Burn-a-bench," however, reads to our eyes much better than "Burn-a-man." The constable was versed in war, but had no appetite for massacre, and the complete equipment of the troop he led to perform so trivial a work precisely served its purpose, by discouraging resistance, in preventing bloodshed.

The Prince of Condé, at the head of three thousand horsemen, was on his way to Fontainebleau, obedient to the urgent missives of the queen, when he had tidings of the capture of the court, and its removal into Paris. "The plunge is made," he said to Coligny, "and we have gone so far that we must drink or drown." He hurried with his troops to Orleans, where D'Andelot was with some difficulty holding the town against the Catholics. The troops brought by Condé decided the struggle, and the heretics, possessed of Orleans, established their headquarters in that town. Thither they summoned all good Frenchmen to repair, and aid in the deliverance of the king and the queen-mother out of the hands of the triumvirs.

The Guises were accused in manifestoes as the authors

of all mischief and all intolerance. They replied, that whatever was imputed to them must be imputed also to the King of Navarre. As for the accusation of intolerance, had not the king, while in Paris, confirmed that very edict of January which had pleased the Huguenots so much? It was only in Paris and the neighbourhood of the Court that heretics were denied the right of preaching. Manifestoes were in fashion, issued from both sides, and taking every shape of threat, complaint, promise to lay arms down on condition. Each side was in the meantime occupied in raising troops and finishing its preparations for the contest. Since the conspiracy of Amboise, minor struggles, levies of soldiers, besieging of towns, wasting of crops, had been perpetrated by such private adventurers as Maugiron in the Dauphiné, Montbrun in the Comtat-Venaissin, and the brothers Mouvans in Provence. These, however, were mere drops before the storm. The fury of the storm itself was on the point of breaking, when the great mass of the French people became divided into two great factions, represented by two armies, one within the walls of Orleans, and one within the walls of Paris.

The leaders looked abroad for aid, and in so doing employed the usual devices; when the orthodox sought Protestant allies, they said that they were preparing to subdue not heretics, but rebels; and when the heretics laboured abroad for orthodox assistance, they pleaded that they did not fight to subdue the old religion, but to release the king and queen from their audacious captors.

Queen Catherine, meanwhile, who attempted to supply the want of masculine vigour by substituting for it in the management of public affairs feminine tact, accepted the new position that was forced upon her, and endeavoured to act in it, still in pursuance of her old desires. When there came from the Duke of Guise letters to the provinces, commanding death to all the malcontents, there came in the same packets letters from the queen, commanding that mercy should be shown to all. Both wrote in the king's name; and when the puzzled magistrates went, as they sometimes did, to court for definite instructions, they could get no satisfactory answer.

The confederates of Orleans, having formed a league in opposition to the league which bound their enemies

together, having sworn to deliver the king, to put down profanity, uphold the edict of January, and obey the Prince of Condé as their lawful chief, incited a rising throughout France of their adherents. Troops were brought into Orleans from all the provinces by the brothers Châtillon, La Rochefoucault, Rohan, Genlis, Grammont, and other seigneurs. The army in Paris, having the king to show, called itself royalist ; but the greater number of the nobles was attached to the cause headed by the Prince of Condé. In the beginning of June, the two armies, each numbering eight or ten thousand, took the field, the one bent on delivering the king, the other eager to lay siege to Orleans.

Before the contest, at the intercession of Queen Catherine, a last discussion—a last attempt at reconciling differences—was demanded. In it the heretic chiefs promised for themselves and for their followers, by way of oratory, more than they intended to perform ; and being unexpectedly and inconveniently taken at their words by the queen-mother, they escaped only by the breaking of their pledge. Instead of marching like heroes into voluntary exile for the sake of peace, they suddenly marched down upon the royalists to give them battle unexpectedly. The orthodox, however, were not to be taken by surprise, and the heretics turned off to besiege Beaugenci, which town they took and pillaged. The Huguenot soldiers sang psalms in their camp, and had many hours of prayer from sunrise until sunset ; but the sack of a town, never a pious scene, will not endure description where all evil passions that belong to it are heightened by fanaticism. Whatever inhumanity the Huguenots displayed in Beaugenci was equalled by the royalists in Tours, Poitiers, and other towns which they succeeded in delivering to pillage.

The queen, by letters, urged the Prince of Condé to submit to a conciliatory policy, and warned him that an edict was preparing of the utmost severity against the heretics, that the king himself would be placed at the head of the royalist army, and that reinforcement was expected from abroad.

The time for conciliation was, however, past. The declaration foretold by the queen was made at the end of July, wherein the king declared all those who were in arms against him guilty of treason, condemned them to death,

confiscated their property, and deprived all their posterity of title to bear charges or honours in the kingdom. Only the Prince of Condé was excepted from the condemnation, because it was thought prudent not to drive him to despair. The confederates replied that they were no traitors, but that they refused submission to the house of Guise ; and the old work of civil war, tumult, massacre, battle, and siege, went on.

Every town in France was filled at that time with the riot of contending factions. In Saintes, as Palissy has told us, M. de la Boissière had won an ample congregation, and the heretics of Saintonge had made their voices potent. "In those days," says Palissy, "the priests and monks were blamed in common talk, that is to say, by enemies of the religion, and they said thus : 'The ministers make prayers which we cannot deny to be good. Why is it that you do not make the like ?' which seeing, Monsieur, the theologian of the chapter, betook himself to making prayers like the ministers ; so did the monks, who were paid salaries for preaching ; for if there was a shrewd brother, awkward customer, and subtle argumentator among the monks in the whole country, he must be had in the cathedral church. Thus it happened, that, in those days, there was prayer in the town of Xaintes every day, from one side or the other." This constant prayer is a fearful preface to a bloody contest. Palissy describes also very pithily the alarm of the tithe-owners at the refusal of the country people to pay for church service unless preachers were provided for them, citing the odd case of an orthodox attorney who got into the pulpit and preached heresy himself, in order that he might receive his money. "In those days," he tells us, "deeds were done worthy enough to make one laugh and weep at the same time ; for certain farmers, hostile to the religion, seeing these new events, betook themselves to the ministers to pray that they would come and exhort the people of the district which they farmed, and this in order that they might be paid their tithes. I never looked so merry, though I wept the while, when I heard say that the attorney, who was criminal-notary when suits were brought against those of the religion, had himself made the prayers, a little while before the devastation of the church in the parish of which he was farmer. It is to be decided whether when he

himself made the prayers he was a better Christian than when he made out the indictment against those of the religion; *certainly*, he was as good a Christian when he made out the indictment as when he made the prayers, provided that he made them only to get out of the labourers their corn and fruit."

"The fruit of our little Church," says the Potter, speaking, it is to be remembered, of a Church which he himself had founded—"the fruit of our little Church had so well prospered, that they had constrained the wicked to become good; nevertheless, their hypocrisy has been since then amply made manifest and known; for when they had license to do evil, they have shown outwardly what they kept hidden in their wretched breasts. They have done deeds so wretched that I have horror in the mere remembrance, at the time when they rose to disperse, engulf, ruin, and destroy those of the Reformed Church. To avoid their horrible and execrable tyrannies, I withdrew myself into the secret recesses of my house, that I might not behold the murders, cursings, and indecent deeds which were done in our rural glades; and being thus withdrawn into my house for the space of two months, I had warning that hell was loose, and that all the spirits of the devils had come into the town of Saintes; for where I had heard a little while before psalms, canticles, and all honest words of edification and of good example, I heard only blasphemies, blows, menaces, tumults, all miserable words, dissoluteness, lewd and detestable songs; in such wise, that it seemed to me as if all virtue and holiness on earth had been smothered and extinguished; for there issued certain imps out of the Château of Taillebourg, who did more ill than the demons of antiquity. They, entering the town, accompanied by certain priests with naked sword in hand, cried, 'Where are they?' They must cut throats immediately; and so they did to those who walked abroad, well knowing that there was no resistance; for those of the Reformed Church had all disappeared."

This disappearance of Reformers from the town of Saintes is explained to us in a contemporary chronicle. The Count de la Rochefoucault had held at Saintes a little synod to assert the justice of the Huguenot cause, and with the troops thus augmented had made a vain attempt on Rochelle, then taken Pons by assault, and attacked St.

Jean. Before St. Jean, he heard that Duras, an ally, whom he expected on the way to join him, had been attacked near Vers by our old friend Montluc, and had been thus compelled to change his course. The march of La Rochefoucault to meet with Duras was shared by nearly all Reformers of the district able to bear arms, "especially," says the historian, "by those of Saintes ;" which town, being thus deprived of its soldiers, was taken by Nogeret, a hostile leader, "who rudely treated all those who remained, in execution of a decree from Bourdeaux, by which the lives of the Reformers were abandoned without appeal to the mercy of any royal judge whatever." Among those who remained was Palissy, who thus describes to us the horrors that made part of his experience while he continued for two months secretly persevering in his labour as a potter, and avoiding prudently the dangers of the street :—

"In any case to find evil, they took a Parisian in the streets, who was reported to have money ; they killed him without meeting any resistance, and exercising their accustomed trade, reduced him to his shirt before life was extinct. After that, they went from house to house, to seize, sack, gluttonise, laugh, jest, and make joy with all dissolute deeds and blasphemous words against God and man ; and they did not content themselves with jesting against man, but they also jested at God ; for they said, that Agimus had beaten the Eternal Father.

"In that day there were certain persons in the prisons, to whom the pages of the canons, when they passed before the said prisons, said jesting, 'The Lord will help you ;' and they said to them again, 'Now say, Avenge me, espouse my cause.' And some others, beating with a stick, said, 'The Lord be merciful to you.' I was greatly terrified for the space of two months, seeing that the linkboys and blackguards had become masters at the expense of those of the Reformed Church. I had nothing every day but reports of frightful crimes that from day to day were committed ; and it was of all those things the one that grieved me most within myself, that certain little children of the town, who came daily to assemble in an open space near the spot where I was hidden (exerting myself always to produce some work of my art), dividing themselves into two parties, and casting stones one side against the other,

swore and blasphemed in the most execrable language that ever man could utter ; for they said, ' By the blood, death, head, double-head, triple-head,' and blasphemies so horrible, that I have, as it were, horror in writing them. Now, that lasted a long while, while neither fathers nor mothers exercised over them any rule. Often I was seized with a desire to risk my life by going out to punish them ; but I said in my heart the seventy-ninth Psalm, which begins, ' O God, the heathen are come into thine inheritance.' "

The children playing in the street at Catholic and Huguenot, and cursing one another, form indeed a feature of the civil war more horrible than massacres themselves.

The workshop of Palissy, which had been erected for him partly at the expense of the Constable Montmorenci, did not long shelter him from harm. It was thrown open to the feet of a wild rabble, supported by the officers of justice, and all the pottery on which he had been employed was broken. Palissy held for his protection a safeguard from Louis de Bourbon, the first Duke of Montpensier, and nearly all the great men of Saintonge were his patrons and his friends. But he had been too bold an advocate of heresy to be omitted from the list of the proscribed. There were friends who in the daytime might have interfered on his behalf. At night, therefore, the trampling of the officers of justice at their door awoke the family of Palissy. Under the starlight he was hurried to a dungeon at Bordeaux, the waiting-chamber to the scaffold.

Book the Fourth.

THE NATURALIST.

1562—1530.

CHAPTER I.

PALISSY RESCUED—HIS SECOND BOOK.

IMPRISONMENT of Bernard Palissy implied stoppage of decorative works upon the premises of many wealthy people. Palissy put to death meant the extinction of an ornamental art. Great men required the service of the potter, and stretched forth their hands, therefore, to withdraw him from the gallows. Perhaps they were incited to their efforts by his virtue also.

Palissy in Saintes had been protected by the leading men of either faction. By the Catholics it was well known that he worked for Montmorenci, in a building that had been erected for him partly by the constable himself; he held also a document, signed by the Duke of Montpensier, forbidding the authorities "to take cognisance of or undertake anything against him or his house." This had been conceded for the express purpose of ensuring the completion of the work in progress for the Constable Montmorenci. To the Reformers it was known not only that he sympathised in their religious views, but that the Count de la Rochefoucault had forbidden all intrusion on the workshop of the artist.

Nevertheless, Bernard had been prosecuted by the dean and chapter of his town—men, he says, "who have none occasion against me, except in that I have urged upon them, many times, certain passages of Holy Writ, in which it is written that he is unhappy and accursed who drinks the milk and wears the wool of the sheep without providing for it pasture. And by as much as that ought to have incited them to love me, they have therein made for themselves occasion to desire that I should be committed to destruction as a malefactor; and it is a true thing that if I had depended on the judges of this town, they would have caused me to be put to

death before I should have been able to obtain any assistance."

The Sire de Pons and his lady—the Sire de Pons being king's lieutenant in Saintonge—had interfered in time to prevent the complete annihilation of the workshop of Palissy, which had been decreed by the wise men of Saintes in their town-hall. But Palissy was carried off "at night by by-roads to Bourdeaux." From the parliament of Bourdeaux he could have no mercy to expect, and once at Bourdeaux, the only rescue that would be available must be in the king's hand stretched out from the throne.

The king's lieutenant in Saintonge, the Sire de Pons, had power to control the justices of Saintes; but the parliament of Bourdeaux, in its district, swayed the power of the king, and the justices of Saintes well knew that if they could carry Palissy to Bourdeaux, and there place him at the mercy of the parliament, the interference of the king himself alone could save him.

The Sire de Pons immediately exerted himself; the Seigneur de Burie and the Seigneur de Jarnac were equally prompt to communicate with Montmorenci. Palissy, in a dedicatory epistle to his great patron the constable, quietly assigns the motive of their zeal in his behalf. He had said how the Duke de Montpensier gave him a safeguard, "well knowing that no man could bring your work to a completion but myself." He adds that when he was imprisoned, the above-named seigneurs "took great trouble to cause me to be delivered, with the design that your work might be completed." If Palissy had not acquired his secret as a potter, if his death had not meant the extinction of an ornamental art, in that year 1562 he would have died upon the gallows.

Montmorenci, being suddenly informed by his good friends upon the spot of the fate that threatened the ingenious potter, Master Bernard, lost no time in addressing the queen-mother, and securing the safety of his workman. Queen Catherine, who would, of course, in so trifling a matter oblige the great constable, had also a taste for the patronage of clever artists. An edict was therefore issued in the king's name, appointing Palissy inventor of rustic figulines to the king and to the constable. This removed him from the jurisdiction of Bourdeaux; for, as a servant of the king, his cause could

come under no other cognisance than that of the grand council. By the same edict Palissy received also, of course, such encouragement as public honour might afford him in the prosecution of his art. The court protected Master Bernard, not because he was a shrewd observer, a good naturalist, or a pure-minded Reformer ; the honour of its protection was bestowed on Palissy the Potter, worker in earth, according to his own designation of his calling, "Worker in Earth, and Inventor of Rustic Figulines."

The men who have just been named as intercessors for the life of Palissy were men of mark in their own time, whose names are constantly recurring in contemporary records which extend over a large part of the sixteenth century. The Seigneur de Burie was an old man who had fought in Italy, and whose name has already occurred upon these pages in connection with the early campaigns of Montluc. He belonged to an ancient house of Saintonge, and was now lieutenant-general of the king in Aunis, under the orders of Antony, King of Navarre. The Seigneur of Pons, which is a town not far from Saintes, was, as we have seen already, the king's lieutenant in Saintonge. He was also Count of Marennes, the famous salt district. The Seigneur de Jarnac, Governor and Seneschal of Rochelle, was a veteran soldier, chiefly famous for his duel, fifteen years before this civil war, with the Seigneur de la Chateigneraie. As the story of that duel illustrates the times, it may be worth narrating.

In the last year of the reign of Francis I. scandal arose at court, which very much concerned the Dauphin Henry. Jarnac had communicated to the dauphin flattering intelligence from a great lady of the court, which the imprudent dauphin had confided to some friends. His friends increased the circle of the revelations, and the enemies of the great lady, hearing the story, published it abroad and made the best or worst use of it they could against her. The king, incensed, proceeded to inquire with whom the scandal had originated. The dauphin, who was no great favourite with his father, and had recently fallen into disfavour by seeking the recal of Montmorenci, dared not avow his fault. To check further inquiry, a friendly knight, the Seigneur de la Chateigneraie, stepped forward

and declared that the unwelcome rumours had originated with himself. Chateigneraie was one of the two or three most formidable knights in a court that laid the greatest stress on chivalry, and was accordingly a favourite companion of the king. He could literally take a bull by the horns, and felt, therefore, that he incurred little risk in doing so metaphorically in the present instance to protect the dauphin. Jarnac felt compelled to challenge the camp Hercules, who, with the true instinct of a gamecock, crowed in advance over an easy victory. The challenge was of course accepted, and King Francis dying, the combat, which took place at sunset in the Park of St. Germain en Laye, before the new king Henry and the assembled court, was one of the first acts at which Henry assisted after his accession to the throne. Chateigneraie, who could hurl his lance into the air and catch it three times in succession while he galloped at full speed over a plain, prepared a feast beforehand in his tent to celebrate his victory. Jarnac was accounted a doomed man, but by a dexterous stroke, known to this day in duels as the *coup de Jarnac*, he wounded his opponent in the ham, and vanquished him completely. Chateigneraie lay bleeding under the sunset on the green sward of the park, and was carried thence, not to the feast prepared within his tent, but to the bed on which he was to while away the few remaining hours of life. The laurels of this victory were always green upon the head of Gui de Chabot Jarnac, who now, some fifteen years after the duel, united with the Sire de Pons and the Seigneur de Burie in intercession for the life of Bernard Palissy.

It is a coincidence of no very startling character, although perhaps worth naming, that the edict against Reformers, under which Palissy was arrested, had been dated by Henry II. from Ecouen, in June, 1559; while it was from his own labours at Ecouen that Palissy derived the patronage which saved his life.

Palissy, saved from the power of the parliament of Bordeaux, and being thoroughly protected now against hostility from the belligerents on either side, returned to his family, and quietly resumed his occupations in the half-depopulated town of Saintes. Churches had been battered, and antiquities destroyed. Friends of the Potter had been slaughtered in the streets, or sent to die

upon the gallows. The workshop of Palissy had been thrown open to the sky, and its broken doors invited the intrusion of the people. Bernard made the requisite repairs, and wiped away the traces of the interruption; while he not only resumed his old work, but also his old habits among the woods and fields, and his old way of speaking freely what he felt to be the truth. The prison of Bordeaux, and his near escape from death, inspired him with so little terror, that the first year of recovered liberty was occupied in seeing through the press of Barthelemi Berton, at Rochelle, a little book which he proposed to dedicate to the queen-mother and the Constable Montmorenci, and in which, among other matter, he did not scruple to utter with the utmost freedom his opinions as a Huguenot. No man had any right to put his mind in fetters, no man had power to make Palissy afraid; and so the simple-hearted potter thought and spoke what seemed to him the necessary truth with tranquil honesty.

The book which Palissy, after his rescue from prison, busied himself in seeing through the press, contained treatises on four subjects—namely, agriculture, natural history, the plan of a delectable garden, to which is appended a history of the troubles in Saintonge, and the plan of a fortified town, which might serve as a city of refuge in those times of trouble. The treatises, containing part of the experience of his past years, had probably been written before his imprisonment, since it is only in his prefatory matter that he has made reference to that event. The book into which they are collected, in which one of the leading objects is to instruct men to avoid the enormous waste occasioned to the fields by defective care of the manure, is thus entitled: “A Trustworthy Receipt, by which all the men of France may learn how to multiply and augment their Treasures. *Item*.—Those who have acquired no knowledge of letters, may learn a philosophy necessary to all dwellers in the earth. *Item*, in this book is contained the design of a garden as delightful and useful in invention as ever has been seen. *Item*, the design and arrangement of a fortified town, the most impregnable of which men have ever heard.” This book was published in a quarto form at Rochelle, by Barthelemi Berton, in the year 1564, being the second year

following that in which Palissy had been committed to the dungeons of Bordeaux.

In a book published fourteen years later we find the results of his matured experience, and the whole sum of his acquirements as a naturalist who had pushed forward far beyond the knowledge of his time. In this book we find Bernard labouring onward, writing in the simplicity of an unlettered man, whom God has gifted with a quick and subtle genius, who, with the perfect mind of a philosopher, and fearlessness of manly thought and speech, is naïve and single-hearted as a little child.

The letters written after his release, by Palissy, and prefixed to his book, are addressed respectively to the constable and to his son, to the queen-mother, and to the reader. To the eldest son of the constable, the Marshal de Montmorenci, governor of Paris, the first letter speaks ; and it commences with an idea repeated solemnly by Palissy in other writings, which was, indeed, the mainspring of his intellectual machinery. The parable of the talents—the duty of every man placed in the world to see how he might turn all his powers to account, and do the utmost good of which his mind was capable—was the touchstone by which Bernard tried the temper of his industry. This religious feeling, aiding and strengthening his natural activity of mind, forced Palissy to pursue with energy every path by which he thought he could arrive at truth. He never remained satisfied with what was done, for there was always more to do. He laboured ever forward in his art ; he studied nature, not as a recluse, but as a man ready to seek every opportunity of turning his discoveries in science to the practical advantage of his race. He saw that if men kept honest local records, history would be more correct, and therefore he narrated the events of his own town. He saw errors in Church discipline, which caused misery and strife, and he proclaimed honestly all that he saw. Having finally acquired much knowledge, and eliminated what he thought to be some valuable practical ideas, from the spreading of which over the country good would follow, it became his duty to spread them if he could, and that was his first motive for the publication of his book.

He did not profess indifference to either praise or profit. His mind was too healthy to be ashamed of any just and

natural desire. He would be very glad to be entrusted with any profitable commission, and without hint-dropping or circumlocution, whenever it occurred to him that he could be useful to somebody with profit to himself, he wrote what he thought in his own honest unaffected manner.

For inscribing his first letter to the Marshal de Montmorenci, the eldest son of his great patron, Palissy may have had several motives. The son of the constable represented less perfectly than his father the faction of the triumvirate ; he had endeavoured to dissuade the old man from his coalition with the Guises ; and differing not very much in age from Palissy, at the same time that he was liberal in temper, Palissy felt for him, as perhaps he felt for Palissy, if they had met often at Ecouen, beyond the relation of patron and client, a good deal of human liking. Then again, by addressing his first letter to the younger Montmorenci, Palissy could address the queen-mother afterwards with greater delicacy. He shrank altogether from the fiction of a grateful letter to the king, nor did he wish, by writing to the queen-mother on his first page, coarsely to thrust himself before the notice of the throne. To have placed his epistle to the queen after that which he addressed to the elder Montmorenci, considering the great power and influence of the old constable, would have been a precedent that might have suggested to the queen herself distasteful reflections. The less prominent son of the marshal was, therefore, chosen to stand in the first place among his dedicatory letters ; after that he paid his humble duty to the queen and constable. These considerations would be strengthened by the dictates of self-interest, which would suggest the marshal as a very likely man to trust the workman whom his father trusted. There was some hope that he might give Bernard commission to execute that design for a delectable garden which the book contained, and to which the straightforward potter solicited his practical attention. Again, the heir of the old constable and of the estate at Ecouen was a man whose friendship it became the interests of Palissy to cultivate, if he could do so in any honourable way. I have suggested a variety of possible motives, and more could be adduced if it were worth while, for few men act in any way upon a single motive only. Therefore,

when men are asked what was their reason for an act, the question ought almost invariably to be, what were their reasons? and when for their reply they give a single motive, they often misrepresent even themselves, because they are unable to reproduce in a few words, if they are able to recal, a complex process of the mind.

The conclusion of the letter to the marshal well displays the elegant and nervous style which Palissy attained by speaking the clear thoughts of a man of genius in the words which they themselves suggested, without any strain for artificial polish. "If these things are not written with so much dexterity as is due to your greatness, you will be pleased to pardon me; and this it is my hope that you will do, seeing that I am not Greek, nor Hebrew, nor poet, nor rhetorician, but a simple artisan, poorly enough trained in letters: this notwithstanding, for such reasons, the thing in itself has not less value than if it had been uttered by a man more eloquent. I had rather speak truth in my rustic tongue, than lie in rhetoric. Therefore, my lord, I hope that you will receive this small work with as ready a will as I have a desire that it shall give you pleasure."

The clearness with which thoughts presented themselves to the lively apprehension of the potter led him at all times to speak them in words accurately fitted to his meaning. For this reason the French written by Palissy three centuries ago has very little of an antiquated cast; his language, like his mind, appears to have marched forward out of his own time.

The next epistle, addressed by the liberated potter "To my very dear and honoured lady, Madame, the Queen-Mother," relates how, when he had been delivered from the hands of his cruel enemies by her "means and favour, at the request of my lord the constable," he reflected that it had been ungrateful in men to imprison him for admonishing them to their own advantage. And then, considering whether there might not be in himself also some spirit of ingratitude, he remembered the favour of the queen, "which seeing, I found that it would be in me a great ingratitude if I were not regardful of such boon. Nevertheless, my indigence has not permitted that I should transport myself into your own presence to thank you for such boon, which is the smallest recompense that

I could make." It is not at all probable that in the most prosperous time of his life Palissy was rich. The art of pottery, especially to one who does not labour by the light of past experience, is very costly. The spoiling of elaborate work in the furnace, loss of much material and time and labour, is a frequent accident; and Palissy, who always laboured forward into unknown regions for increase of skill, was of course always paying for his knowledge by mishaps attendant on his spirit of adventure. If he had hoarded any little store, it would have been consumed during his imprisonment, and the last coins of it were probably expended in the repair of damage that had been done to his workshop by his enemies. The expense of publishing his book, and travelling upon that business between Saintes and Rochelle, would further burden him; he might well, therefore, plead indigence as his apology for not incurring the expense of an appearance at the court. He offered to the queen, however, the secrets contained in his book.

In his epistle to his great patron the constable, Palissy first excuses himself for not having rendered thanks at the time when he was drawn "out of the hands of his mortal and capital enemies. You know," he says, "that the occupation of my time upon your work, together with my indigence, have not permitted it. I doubt whether you would have found it good if I had quitted your work to bring you large thanks." Palissy then narrates to the constable briefly the cause and manner of his arrest. He accounts for his continuance at Saintes during the heat of the contention, and after his enemies possessed the town in triumph, by saying, "I should have taken good heed not to fall into their sanguinary hands, had it not been that I hoped they would have regard for your work, and for their duty to Monseigneur the Duke de Montpensier, who gave me a safeguard, forbidding them to take cognisance of or undertake anything against me or against my house; well knowing that no man could bring your work to completion but myself." After telling the tale briefly, he adds, "I have written to you all these things, in order that you might not be of opinion that I had been imprisoned as a thief or murderer."

Addressing in the last place the reader, and praying him "to call to mind a passage which is in the Holy

Scriptures, there where St. Paul says, that each one according as he has received gifts should distribute thereof to others," he urges upon him the duty of instructing his unlettered labourers, "that they may be made carefully to study in natural philosophy, according to my counsel." The instruction of agricultural labourers in natural philosophy is an idea that sounds speculative enough even in the present day. But Palissy was right; his notion was clear-sighted and practical. If farmers had gifts of knowledge to distribute to their servants, they could raise them very quickly in the scale of intellect, and there is no knowledge so easy of acquisition and so interesting to unlettered men as plain and useful information on the meaning of the processes of nature. If labourers were taught to know the reason that is in their daily labour, and the ways of nature which it is their occupation to assist, they would not only work more happily and blunder less, but would contribute in some independent ways to the advance of agriculture.

"Especially," says Bernard, "let that secret and precept which concerns manure-heaps, that I have put into this book, be divulged and made manifest to them; and that also," he adds, allowing for the slow perceptions of the ignorant, "so long as may be needed, till they hold it in as high esteem as the thing merits. Since so it is, that no man could estimate how great the profit in France would be, if on this subject they would accept my counsel." Palissy then mentions "a kind of earth called marl," which he had seen used as manure "in certain parts of Gascony, and some other regions of France." This subject he promises to investigate and treat of in a third book, "if I see that my writings are not despised, and that they are put in execution."

After again defending as quite practicable his ideas for the garden and the fortress, Bernard's epistle to the reader thus continues:—"I have also found so much ingratitude in many persons that this has caused me to restrain myself from too great liberality; at the same time, the desire I have toward the public good will incite me some day to take an opportunity of making the picture of the said garden, according to the tenour and design written in this book. But I would like to beg of the nobility of France, that after I shall have occupied my

time to do them service, it will please them not to return me evil for good, as the Roman ecclesiastics of this town have done, who have desired to get me hung for having sought on their behalf the greatest good that could accrue to them, which is, for having wished to incite them to feed their flocks, following God's commandment. And no man can say that ever I have done them any wrong ; but because I urged upon them their perdition, according to the eighteenth of the Apocalypse, seeking thus to amend them, and because many times also I had shown them a text written in the Prophet Jeremiah, where he says, 'Woe unto you, pastors, who drink the milk and wear the wool, and leave my sheep scattered upon the mountains ; I will demand them again of your hands ;' they, seeing such a thing, instead of amending, hardened themselves, and banded themselves together against the light." The simple, earnest potter, who seems to have regarded it as a plain duty to expostulate with the well-dined ecclesiastics of his town, to urge upon them their perdition, and awaken them, if possible, with the solemn note of texts that pronounce woe against unfaithful pastors, speaks half in real, half in ironical surprise at the return he had for all his good intentions. "I never should have thought," he tells his reader, "that for that cause they would have wished to take occasion to put me to death. God is my witness, that for the evil they have done to me they had no other occasion than the above named."

Finally, Bernard commends to all his readers agriculture as "a just toil, and worthy to be prized and honoured ;" and again, urges his desire "that the simple may be instructed by the wise, in order that we may none of us be rebuked at the last day for having hidden talents in the earth." With this last thought—a thought always predominant in his own mind—couched now in the most solemn form of adjuration, Palissy ends as he began his series of prefatory letters.

Palissy's second book is chiefly interesting for the complete and lively way in which it makes a revelation of the entire mind of the writer. It is essentially original, and full of the charm conveyed by brilliant genius acting on its own impulses, in independence of all schoolmen, perfectly regardless of the prepossessions and the prejudices

of the world. It presents the picture of a free mind and nimble fancy working and playing on their own behalf three centuries ago, and pushing their own wholesome roots among the corruption of the soil in which they lived. Bernard, wandering among the woods with exquisite appreciation of all beauties of Nature—searching among her secrets—at one time applies his study to the ways of workers in the fields, and demonstrates how they may increase their substance by avoiding certain errors; at another time he contrasts the peace of woods and meadows with the jar of human strife, and dwells with playful satire on the follies, or with stern denunciation on the crimes of his own time. The intimate union in his writings between a love of nature and a spirit of unaffected piety; the cheerfulness of Bernard's piety as a pervading feature of his disposition—not incompatible in his case with the rigid sense of virtue and of discipline proper to a Huguenot who worshipped as he would in spite of the severest penalties—are characters that lie upon the surface. When he tells the story of the Reformed Church of Saintes, or comments elsewhere, as he always comments, freely on the great religious questions of the day, it should be observed, that however bluntly and sternly he may upbraid the ecclesiastics, he nowhere quarrels with them about dogmas of theology. He does not seem to care much whether they be good theologians or not, but he desires that they shall be good Christians only. He would have them to preach and take care for the poor; but he complains that they grow fat upon the substance of the people, and neglect the fulfilment of their charge. He complains of avarice that cuts the forests down, of pride, contentiousness, and acts and passions that disgrace the Church of Christ. There can be little doubt that he adhered to the whole body of Calvinistic doctrine, but he does not trouble us with any syllable from which we can infer that he possessed a theological passport properly filled up by Calvin, Beza, or any other ambassador of Heaven, for insuring his safe transit over the confines of this world. From the works of Palissy we only learn that he was thoroughly and reverently acquainted with the Bible, and that he laboured to apply its precepts practically to the regulation of his daily life. His reverence of Nature, and that inexpressible percep-

tion of the goodness equalling the wisdom of the Creator, which is the best lesson that Nature teaches to her simple-hearted scholars, most effectually let the sunshine into Palissy's religion.

Palissy wrote without a thought of polished sentences ; he never used his pen unless he had in his mind some matter worth inditing.

Vivacity of mind prompted Bernard to plan all his writings in the form of dialogues, in which he represents as speakers Theory and Practice, or Experiment. His liveliness, his clear and philosophic spirit of inquiry, his strength of purpose, and the purity and grace communicated to his mind by long communion with nature and true wholesome piety, utter themselves in the works of Palissy, and reveal the character of the writer, many of his thoughts, and many of the circumstances of his life, without a trace of egotism. He hides, indeed, no sense of honourable pride, he affects no false modesty ; but he causes us to delight in him and love him by the absence of all effort to acquire our admiration. His narrative of his struggles and sufferings while he was labouring in vain for the white enamel is one of the best pieces, perhaps the best piece, of naïve writing to be found in the whole range of modern literature. The fortitude which Palissy displayed during those efforts is even less to be admired than the simplicity with which they are related.

In agriculture he says what is true, unhappily, to this day in many parts of France, of men who are born, as Palissy was born, in a peasant's station :—" Each labours on the soil without any philosophy, and all jog always at the accustomed trot, following the footsteps of their predecessors, without considering the nature or the prime causes of agriculture." Being cried out upon for the belief that labourers would be the better for some philosophy, Palissy emphatically reiterates his position ; "dares well affirm, too, that if the earth were cultivated as it ought to be, one day would give the fruit which two give in the way that it is now cultivated daily."

He passes on to explain the philosophy of manure, and points out, in language that would not discredit any modern chemist, the reason why all farmers in France wasted their own goods when they left their manure-heaps at the mercy of the rains. He talks philosophically about

salts, preaching an agricultural doctrine common enough now, but at that time exclusively the product of his own reflection and research. His querist declares that for a hundred years' preaching he would not believe that there is salt in muck-heaps ; Palissy therefore proceeds to convince him, by a detail of experiments, that salt is contained in plants—not common salt, but salts of divers kinds—and that the manuring of a soil consists in restoring salts that have been removed from it by vegetation. It is by attention to these facts, and ceasing from the universal habit of allowing the manure to be spoilt by exposure, that Palissy proposed to all the men of France to multiply their treasures. To increase the productiveness of the soil, and to cheapen accordingly its produce, would have been to increase the wealth of every Frenchman. It is to this doctrine that Palissy refers in the first part of the title of his book.

The passage of water through rocks brings Palissy, in another part of this book, to the subject of springs, of which he proceeds next to detail the theory with perfect accuracy—a theory of which he stood alone in France as the discoverer.

The third of the four treatises included in the second work of Bernard Palissy displays his plan for a delectable garden.

His garden had been first suggested upon hearing the 104th Psalm sung in the fields by pious maidens, in the days when the Reformed religion flourished in Saintonge. Throughout the history of France, whenever the heart of the nation has been stirred—in all great changes, whether religious or political—an outlet for the feelings has been found in song. Every new movement among the people of that country finds its musical expression ; and religious part-songs, formed by uniting popular airs with the words of the Psalms, as translated by Marot and Beza, or with psalms as translated into verse by local preachers, formed a familiar part of the language used by those of the Reformed doctrine. This was the case not in France only. Luther held that no man was a fit instructor of the people who was unable to sing. He replaced Latin chants with chorals in the vulgar tongue, and gave to the German hymn-music an impulse that carried it to France. Nor was the love of psalm-singing

confined to the Reformers. Francis I. himself sang psalms of Marot, and quoted them upon his death-bed ; and Henry II., it is said, hummed Marot's version of the 42nd Psalm—"Ainsi qu'on oit le cerf bruire"—when he went hunting.

The singing in the fields was partly forced upon the people by their exclusion from participation in the music of the Church, for that had come to be performed wholly by paid chanters. Earnest feeling was still further checked by the obscene associations often connected with the music of a mass, wherein the Sanctus or the Benedicite was decent if it ran to the tune of nothing more objectionable than "Baise moi, ma mie." Lascivious music was in favour with the orthodox, and the lasciviousness they favoured most was, as to musical expression, that of bulls. Francis I. had led the fashion by his predilection for bull voices—*taurinae voces*—which were soon sought for in all churches, and proved to them so costly that a canon of Auxerre endeavoured to economise by the invention of a musical instrument that should supply the place of these bass roarers—the serpent. The psalms of the people, silenced in the churches, were to be heard then only out of doors ; and wherever the Reformed religion took strong root they were to be heard incessantly. It was no more than an incident of daily life in Saintes that led Palissy to the first idea of his garden ; and in Marot's version of the 104th Psalm, no part is more charming than that which, sung by the voices of girls in the meadows themselves, filled Palissy with a sense of the divine beauty that is in the woods and brooks and fields. Contemplating the sense of the said psalm, he was seized with so great an affection for the building of his garden that, "since that time," he tells us, after he has detailed his plan, "I have done nothing but toil over again within myself the building of the same ; and often, in sleeping, I have seemed to be about it, as it happened to me last week, that when I was asleep upon my bed, my garden seemed to be already made, and in the same form that I described to you. and I already began to eat its fruits and recreate myself therein ; and it seemed to me that, walking in the morning through the said garden, I came to consider the marvellous deeds which the Sovereign has commanded Nature to perform."

The pious naturalist then proceeds, under the figure of a dream, to walk about the garden of his fancy, and to call attention to the wisdom displayed through the works of creation. The accurate adaption of means to divers ends, he points out, in particular instances, with an acuteness that displays how thoroughly he had been gifted with the naturalist's faculty of observation, and how philosophic was the disposition of his mind.

From this topic he passes naturally to a consideration of the havoc done among the woods and fields by the avarice of benefice holders, or the ignorance of farmers. The censure of the agricultural tools, "clumsy at their first invention, which are preserved ever in their clumsiness," leads to the question, Which tools would be requisite for the construction of the before-mentioned garden? Palissy having named them, feigns with a lively wit another dream, in which his tools were to be heard quarrelling for precedence, and being at last rebuked by the Astrolabe, who told them that they were all subject to the head of man, they spoke so contemptuously about man, "who has not a straight line in him," that Bernard, still in dream, desired for himself to subject a man's head to measurement. He then enters upon a series of humorous researches into human heads and bodies, by means of his tools and retorts, flasks and sand-baths, which "separate all the terrestrial parts from the exhalative matter." He examines priests, fops, lawyers, tradesmen, and fine ladies, and relates the result in such a manner as to give a lively picture of the sins and follies prevalent in his own time. This leads him to speak of the great troubles he has seen occasioned by the "follies and rogueries of men." He tells how he had "thought within himself to make the design of some town or city of refuge in which to retire in time of wars and troubles, and evade the malice of many horrible and insensate plunderers, whom I have before now seen in the execution of their furious rage against a great multitude of families, without having regard to just or unjust cause, and even without any commission or commandment." "I pray to God," he says, "to give us His peace; but if you had seen the horrible excesses of men that I have seen during these troubles, you have not a hair in your head that would not have trembled at the fear of falling to the mercy of man's

malice. And he who has not seen these things could never think how great and horrible a persecution is."

Being then asked to tell how persecution arose in his own district, Palissy proceeds to relate the "History of the Troubles of Saintonge," because it would be well that in each town there should be persons deputed to write faithfully the deeds there done, in order that by the abundance of such local records there might be provided fit materials for the study of the general historian.

From the consideration of these troubles Bernard naturally comes to the description of that impregnable fortress which he proposes as a city of refuge, "wherein one might be secure in time of war."

By the means of assault that existed in his own time, such a fortress as that planned by Palissy would be impregnable from without. It was a spiral street, designed from the spiral of a shell, strengthened with barricades at frequent intervals. But Palissy appears not to have taken as an element into his calculations the possibilities of a revolt against authority and strife within the gates. If the population of his city of refuge were to fall out upon the topics which in those days divided France, and Catholics should fortify themselves in one street, Huguenots in another, all peaceful streets lying within any blockade would be converted into prisons. As a curiosity, a specimen of ingenuity, this idea of a fortress is extremely interesting. It shows another of the many subjects on which Palissy employed his busy wit, and shows again how thoroughly the love of nature governed all his other thoughts. From the woods and fields he brought his counsel to the farmers. Among the rocks he learnt the secret of the water springs, and learnt a wiser doctrine than that fossils were earth-crystals, moulded by a plastic influence, descending from the stars. Lizards, leaves, flowers—patterns upon which God had lavished beauty—were the chosen models for his elegant designs in clay. A delectable garden was his ideal of earthly bliss, and even when he wished to plan a fortress that should withstand the utmost fury of a siege, he visited the nests of birds, and wandered on the rocks by the sea-shore, and finally adopted the design that was suggested to him by the contemplation of a shell.

CHAPTER II.

PALISSY REMOVES FROM SAINTES.

THE book described in the last chapter was issued in the years 1563 and 1564. On the cover of the copies issued in the year 1564, the author is described as Bernard Palissy of the Tuileries. Palissy continued, therefore, to reside at Saintes only for a very short time after the publication of his "Trustworthy Receipt," and then, under circumstances which we shall presently examine, he removed to Paris.

Hitherto it has been found necessary to include among the chapters of this narrative a brief sketch of the origin of civil war between the Catholics and Huguenots. We could not understand the character of Palissy, or his position in the town of Saintes—we could not feel the significance of the denunciations, or the true sense of the social narratives in the "Trustworthy Receipt"—and we could not enter into the spirit of the relations between Palissy and the Constable Montmorenci or his other patrons without recalling to our minds, as we went on, the progress of political events. Our narrative of the affairs of France need, however, be continued only over one or two more years. It closed with his imprisonment, and it must be resumed in order that we may understand how matters stood at the time when his book issued from the press, and what was the position of affairs in 1564, when Bernard went to Paris. Settled in Paris, Palissy devoted himself wholly to his labours as a potter and a naturalist. He took no part in the contention that distracted France, beyond the exercise of a freedom of speech, that seems to have been humoured as eccentricity in the simple-minded man. The contentions did, indeed, not leave him to repose; he did not, it will be seen, escape his due share of affliction; but his character was formed, his final course of life was taken. We must now dwell for a few minutes

on the current of affairs in France between the date of the imprisonment of Palissy and that of his arrival in the capital ; from that time forward it will not be requisite for us to pay more than occasional and slight attention to political events.

At the end of September, in the year 1562, Rouen, besieged by the Catholics, was taken. The day before the town was taken, Antony, King of Navarre, having retired to the trenches on a summons which the mightiest have to obey, received the shot of a harquebus in his left shoulder. He was carried away to confession and sacrament ; caused the book of Job to be read to him for his comfort ; publicly declared that if he recovered he would adopt the Reformed opinions ; and turned his back upon a Jacobin before he died. His wife, Jeanne d'Albret, had left him to act with the Catholics in Paris, while she had herself retired to maintain Reformed opinions, and educate in them her son Henry, who became afterwards King Henry IV. So Antony, King of Navarre, was gathered to his fathers, and bequeathed to other Navarres his royal state and income of about six thousand a year.

There is another incident connected with the siege of Rouen, told by two or three contemporary writers, which furnishes an odd illustration of the chances and changes to which mortal life was subject in those days, when murder was every man's right-hand neighbour. There was a certain young Norman, Captain Seville, shot in the head, and tumbled from the rampart as a bird is picked off from a bough. At the foot of the rampart he was taken up for dead, and buried about mid-day with many corpses. His valet, coming in the evening with a horse to his master, and learning that he was both dead and buried, pressed to be shown the place of burial, that he might take away his master's body, and embalm it for the comfort of his parents. Having disinterred fifteen or sixteen men, with faces so much bruised and blood-stained that he could not recognise one as his master, he, with the aid of some companions, put the bodies hastily again into the ground. After their return to the camp, the faithful servant felt that they had been irreverent towards the dead, in restoring them so hastily to their graves ; that dogs might commit an easy burglary upon the last home of his master, if his master had been one of the men disinterred and hurried

back into the ground again so carelessly. He persuaded, therefore, some of his companions to return with him after sunset, when the moon was up. Arrived at the ground, the valet saw the hand of a half-buried man protruding from the soil, and on its finger a diamond ring glittered in the moonlight. The ring attracted his attention, and he recognised it as belonging to his master. Captain Seville was then dug up, placed on a horse, and taken to his brother's lodging, where he was left until the third day, stretched on a mattress, because his friends perceived that he breathed, and that there was heat remaining in his body. Many surgeons were brought to the room, but when they saw the patient, carried away their drugs to the crowd of expectant sufferers for whom there was more hope. On the third day there were brought a physician and an advocate, who, forcing open the captain's teeth, poured into his mouth a drug with wine. While they were labouring to restore life in this way, the town was taken, the house entered by the enemy, the brother slaughtered, and the body of the captain roughly taken from the bed, and thrown out of the window. It fell upon a dunghill, and lay there neglected for three days, becoming covered with the filth and straw that were thrown out of the windows of the same dwelling. At last a cousin found the captain's body, and carried it out through the breaches to a village, in which it was resuscitated, and the captain's wounds were dressed, and his health perfectly restored. "I have seen him," D'Aubigné tells us, "forty-two years afterwards acting as deputy from Normandy in the National Assemblies, and observed that when we signed our transactions, he always put 'François Seville, three times dead, three times buried, and three times by the grace of God restored.' Some ministers (contrary to my advice) desired to make him desist from this eccentricity, but they were unable to entreat him out of it." There is a flavour of romance and a suspicious dwelling on the number three in Seville's tale; of course, also, a breathing man, fairly put under ground for a few hours without a coffin, however slow might be the processes of life, would have his breath stopped most effectually. His exaggerated story was, however, credited in his own day and certainly was suited to the day in which it was believed.

After the taking of Rouen, the Prince of Condé, being

reinforced, marched out of Orleans upon Paris. There he was delayed by Catherine before the faubourgs of St. Germain, St. Jacques, and St. Marceau, and lost time over a vain endeavour to adjust peacefully the matters in dispute. Paris being strengthened, Condé, on the 10th of December, 1562, broke up his camp, and hastened towards Normandy to meet some English succours. Of the English troops aiding the Calvinists, and of the German troops aiding the Catholics, I shall not speak. We may remember, however, concerning the German troops, that when bands of them were dismissed with a safe passport, after the first war, Catherine gave secret orders (wisely disobeyed) that, in spite of their passport, they should be fallen upon and destroyed in their passage out of France, in order that none of their brethren might thereafter feel inclined to take part in and aggravate the tumults of the country.

The Prince of Condé hurrying to Normandy, was pursued by the army of the Royalists, and overtaken at Dreux. A terrible battle was there fought on the 19th of December. The constable was taken prisoner, and one of his sons killed. The Marshal St. André, one of the triumvirate, was destroyed by the pistol-ball of a personal enemy. The Prince of Condé, on the other side, was taken prisoner. The battle was won with difficulty by the Duke of Guise, who remained deprived of his two chief competitors at court—of St. André by his death, and of the constable by his imprisonment. The two prisoners, the Prince of Condé and the constable, were on each side treated with affectionate respect, great pains being taken to influence their minds, and disabuse them of the errors into which it was supposed that they had fallen.

The Duke of Guise, left sole head of the Royalists, went to besiege the head-quarters of the Huguenots in Orleans, while Admiral Coligny, sole general of the Reformers, was in Normandy awaiting English money, and preparing to bring help to D'Andelot his brother, by whom Orleans was defended. The Duke of Guise, having ridden out before Orleans to review the preparations on the river for a grand assault, by which he hoped that Orleans might be taken, was shot down at twenty paces by an assassin of good birth, Jean Poltrot de Meré. The duke was taken home, and died in six days; it was said

that the bullet had been poisoned. The assassin, under question and torture, accused Coligny and Beza as the instigators of the crime. Both denied the accusation ; Coligny said that he had paid money to Poltrot for service as a spy, but never hired him for the work of an assassin. The Duke of Guise then died a death of violence, as Antony of Navarre had died, as Marshal St. André had died, and as most of the great friends and rivals who survived him were to die, each in his own turn. The duke died counselling peace, and there succeeded a son, hot in passion, who regarded Coligny as the assassin of his father, and after some years paid his debt of vengeance on the day of St. Bartholomew.

The death of the Duke of Guise produced a lull in the hostilities, while the queen laboured to carry out his dying counsel. Coligny held out against all concession, but he being in Normandy, the captive Prince of Condé was persuaded to consent to offers which saved Orleans, as he believed, and secured tolerable terms for the Reformers at the same time that it closed the war. The treaty was signed at Amboise, on the 19th of March, 1563. It left the Reformers at liberty to worship as openly as they pleased in all towns held by them at the date of the pacification. Elsewhere, they were subjected to numerous restrictions. Coligny, together with a large body of the Reformers, protested loudly against the conduct of the Prince of Condé in signing the conditions of Amboise at a time when, the Duke of Guise being dead, victory was certain. Coligny had an army gathered with much care in Normandy, which would have sufficed to compel the Catholics into concession of a full religious liberty. The treaty was signed, however, and the army of Coligny dispersed. The constable and the Prince of Condé quitted their captivity, and there was peace.

There was, indeed, need of rest for France. From commerce and agriculture men had been called to arms ; fields were untilled, or ravaged ; the finances of the country and the bread of the people were almost destroyed. The poor were compelled to plunder. Hordes of brigands overspread the country, rivalled in ferocity by the acknowledged military leaders, among whom there was none more cruel than Blaise de Montluc. There was need of rest ; but there were no minds calmed, there

was no party subdued, there was no party satisfied. It was, therefore, to be foreseen by all thoughtful men, that there would be a renewal of the war when, on all sides a little breath had been recovered. Palissy spoke of this when he was about to relate his plan for a city of refuge ; and if we do not think that the allusion was interpolated by Palissy before committing his work to the press (it was published a few months afterwards) we must conclude that this last part of his book at least was written after his imprisonment. "It seems to me, when I hear you talk," his querist is made to say, "that you do not feel assured of the peace which it has pleased God to send us, and that you have still some fear of a popular outbreak." "I pray to God," is the answer, "that it will please Him to give us His peace." It was in the beginning of the peace between the first and second civil war that Palissy's "Trustworthy Receipt" was published.

One of the first acts of the peace was to besiege Havre and drive out the English, to whom the town had been ceded by Condé, in pledge for the repayment of money advanced. Condé, in Paris, lived at ease. Cardinal Lorraine had been distinguishing himself at the council of Trent, which closed in December of the same year, 1563. Coligny, accused by the Guises of the duke's death, came to answer for himself at Paris, surrounded by a guard of five or six hundred gentlemen, which he considered necessary to his safety. Catherine, upon that hint, surrounded the king with a guard of six hundred Swiss and five hundred Frenchmen, in addition to the hundred Swiss formed into a royal guard by Louis XI. The Constable Montmorenci supported the cause of his nephew Coligny, regarding it as a private matter which concerned the honour of his house. His opposition to the Reformed Church party continued undiminished.

Peace was made with England, and his Majesty of France, thirteen years old, was declared of age at Rouen. Charles IX., with the queen-mother, her maids of honour, and a gay retinue, accompanied by no more soldiers than civility required, then set forward on a festival journey through the south of France. They travelled, through applause and fireworks, to Bayonne, where the young king was to meet his sister Elizabeth, the Queen of Spain, who had been plighted to the king's

son, Don Carlos, and married, very much against her will, to the grey-headed father of her betrothed. The court set out upon this trip in the year 1564, and returned in 1565, after having visited many of the southern provinces. It may be that Catherine during this tour was visited by Palissy at some point in the royal progress not too distant from Saintes, and that she then engaged his services upon her proposed Palace of the Tuileries. It may be that Palissy was indebted for his removal to Paris to the success of his labours at the Château of Ecouen. The architect of the château, Jean Bullant, was selected to assist in building the new palace of the queen-mother, and with Bullant as architect, it may have appeared natural to summon Palissy as decorator of the gardens. Upon this point we can only speculate; but we know with certainty that very soon after the publication of his "Trustworthy Receipt," Bernard Palissy of Saintes became Bernard Palissy of the Tuileries, his workshop being then, as he tells us in a later book, within the precincts of the Tuileries, and near the Seine.

The object of the queen-mother in founding what is now called the Palace of the Tuileries was very natural. As the king grew in years, it became less advisable that he should reside like a child under the same roof with his mother; Catherine proposed, therefore, to quit the Louvre, and establish a habitation of her own. She by no means intended to retire from active interference in the State affairs, and resolving not to travel far, laid the foundations of her new home on a piece of ground close to the trenches of the Louvre, called the Tuileries. This ground, which had been occupied by tuileries—by tile-kilns—had been bought in 1518 by Francis I., and given by him to his mother, Marie-Louise of Savoy. Catherine added to this ground, in 1564, a purchase of the site of some adjacent buildings, and in the same year caused the digging of the foundations of her new palace to be commenced under the two architects Jean Bullant and Philebert Delorme. The intended palace was named, from its site on what had been the potter's field, placed out of town for prudence and convenience, the Palace of the Tuileries. In the same way one of the finest quarters of old Athens was called the Ceramic, because it covered ground once held by extra-mural potteries. From the

precincts of the Palace of the Tuileries the traces of the brick and tile-makers had not been erased even in the time of Louis XIV. On manuscript plans that belong to the beginning of that reign, the place occupied by wood-stacks and kilns are to be found marked in the courts of the château.

Among the tile-makers, therefore, whose wood-fires were not yet extinguished—among the gardens that partly occupied the site of the new palace—among the pulling down of buildings, and the turning up of earth for the foundations of the queen-mother's new palace, Palissy established his workshop. From that time forward he was able to live in constant intercourse with men of genius and the best works of art collected in the capital. The position of Bernard's works at Saintes must, indeed, before that time have proved inconvenient. His chief patrons were the great men of the court, from whom in a remote province it was not easy to receive frequent visits; and although their houses might be scattered throughout France, it would in most cases be easier to visit them, or to transmit completed works to them from Paris than from Saintes.

Palissy removed therefore to Paris, and established his workshop in the precincts of the Tuileries. His work on behalf of the queen-mother formed only a small part of his daily occupation. His taste being aided by a study of the best works of Italian art, he was now able to surpass his former efforts in the creation of elegant and rich designs. Very few traces of the large figulines of Palissy—his rocks, trees, dogs, or life-like human figures—now remain; but he found much employment in his own time upon such works for garden architecture. The park at Chaulnes, in which Gresset composed his "*Chartreuse*," was executed according to a plan resembling that of the delectable garden. The Château of Nesle, in Picardy, that of Reux in Normandy, and perhaps the royal château called Madrid, after the Spanish captivity of King Francis, in the Wood of Boulogne, are some of the places upon which it is remembered that Bernard Palissy was once employed.

Those works of the famous potter which were meant to adorn rooms, being smaller, more numerous, and better protected than his garden-pieces, have been much more

successful in withstanding all the accidents of time. Statuettes, elegant groups, vases, cups, plates, corbels, rustic basins, and clay, moulded into beautiful forms, enamelled and painted for many other uses, still remain, and obtain a high price as works of taste in our own day. Some, as it has been shown, are covered with modellings, exquisitely coloured, of fruit, shells, fishes, and reptiles. Others present coloured pictures, in the most delicate bas-relief, of subjects taken from mythology or Holy Writ. The colours used by Palissy were commonly bright tints of yellow, blue, or grey; he used also green, violet, and a rich brown, but seldom, if ever, red or orange. His enamel is hard, but he seems never to have succeeded in making it so purely white as the enamel of Luca della Robbia.

During the ten years following his settlement in Paris, Palissy, familiarly called Bernard of the Tuileries, laboured with his sons as a potter, at the same time that he exercised his genius as a naturalist among the men of taste and learning in the capital, and continued actively the prosecution of his studies among the hills and fields. His philosophy grew yearly deeper and wider, and the knowledge displayed in his publication of the "Trustworthy Receipt" was left behind, as he thought his own way forward to maturer views.

This narrative should not omit to chronicle the death of the great patron of Palissy, the Constable Montmorenci. There were two more bursts of civil war and two more peaces between that of which we have already spoken and the Massacre of St. Bartholomew. During these wars Bernard continued quietly at work, and no man interrupted him. At the beginning of the second war, however, he lost his friend the constable, who was brought, with six wounds, into Paris, from the battle of St. Denis, in which, though he was then seventy-four years old, he had been fighting stoutly. He died on the next day, and received from the queen funeral obsequies similar to those lavished upon princes of the blood. She paid the money joyfully, *Sieur d'Aubigné* hints, counting the death of her controller as one of the blessings of her life, and an assurance of success in her designs. The mourning was most thorough in the hearts of old state counsellors, who, deprived of the protecting

shadow of the constable, no longer were assured that they might safely give expression to their sentiments.

In the year 1569, the Prince of Condé perished in the battle of Jarnac. By an accidental kick from the horse of La Rochefoucault, his leg was splintered so that the bone appeared through his boot ; but paying no heed to the injury, he led his troop into the battle, had his horse killed under him, and finally was slaughtered with a pistol-bullet from behind. He was but thirty-nine years old, and perished as Antony of Navarre had perished, and as each member of the old triumvirate, the Duke of Guise, St. André, and the constable, had perished, by a death of violence, unhappily well suited to the temper of the times.

Palissy, in the meantime, laboured in the precincts of the Tuileries. The building of the palace had proceeded steadily, under the care of Delorme and Bullant, and it rose at no great distance from the Louvre, which was then itself a new structure, the design of Pierre Lescot. Lescot, of equal age with Palissy, was the leading architect of his own day, Delorme and Bullant yielding very little precedence to him in reputation.

There is a MS. in the Royal Library at Paris, entitled "*Expenses of the Queen Catherine of Medicis*," in which, among expenditure for the year 1570, there occurs a note of a payment, "To Bernard, Nicolas, and Mathurin Palissys, sculptors in earth, of the sum of two thousand six hundred livres, for all the works in earth, baked and enamelled, which remained to be done for the completion of the (four bridges?—the writing in MS. is indistinct at this part, but appears to be '*quatre pons*') which lead to within the grotto commenced for the queen, in her palace near the Louvre at Paris, according to the agreement made with them."

The grotto here named is perhaps one of those works placed in a circular island, and approached by bridges, in the way described by Bernard in his account of the delectable garden. We find him, at any rate, upon the testimony of the manuscript, to have been busily carrying into effect one of his ingenious garden-plans within the Tuileries, in the year 1570. In the year 1572 Catherine abandoned the Tuileries. Disgusted with her palace, by chimerical predictions, she bought for herself another

home in the Hôtel de Soissons. The Palace of the Tuileries continued to increase from time to time in after years, under succeeding princes, but there remains to our own day little or no trace of the work of its first architects, Delorme and Bullant. Their edifice was planned upon a scale much larger than the present building.

The year 1572, in which Catherine quitted the Louvre (she was then fifty-three years old), is the date of the Massacre of St. Bartholomew. Palissy survived it, though he made no secret of his faith; his quiet life and his employment in the royal service doubtless sheltered him. He had said of the outrages committed in Saintonge, "If you had seen the horrible excesses of men that I have seen during these troubles, you have not a hair in your head that would not have trembled at the fear of falling to the mercy of men's malice. And he who has not seen these things could never think how great and horrible a persecution is." The cry of, "Bleed them, bleed them, for the doctors say a bleeding is as good in August as in May!" the boast of the mechanic, who displayed his arm clotted with blood to the shoulder, and proclaimed that he had thrust a sword with that arm through four hundred living bodies, had no parallel in Saintes. It is happily not necessary for this narrative to dwell upon the familiar story of the Massacre. Palissy escaped. About two years afterwards, in May of the year 1574, Charles IX. died, at the age of twenty-five. He was the fourth king whom death had taken from the throne of France during the vigorous life of Palissy. On the accession of the new king, Henry III., the poor potter, Master Bernard of the Tuileries, was sixty-five years old. He was regarded by all men as a very honest man, vindictively watched by some men as a Huguenot, admired for his clear-sighted philosophy by some of the first scientific men in Paris, but by the rest despised as a mechanic ignorant of Greek and Latin, who did well modestly to call himself "Worker in Earth." He was well known in Paris, and a man to patronise, to talk about as "the poor potter, M. Bernard." But he had no fame in his own day except among the luxurious who bought the produce of his labour in the workshop, or the few men who had enough in them of true philosophy to know the value of his labour in the fields.

CHAPTER III.

PALISSY IN PARIS.

CONCURRENT with Bernard's other occupations was that labour in the art of pottery which he at no time omitted to pursue, during all free years of his life, between the date of his discovery of white enamel and the date of his decease. It may be convenient to state here, that after his death the labour of his workshop seems to have been continued by his sons, who, possessing designs, moulds, and unfinished pieces left to them by their father, used them in the prosecution of their business. In this way it is easy to account for the existence of a plate in which the borders form a pure specimen of Palissy-ware, while the painting in the centre represents Henry IV. and his family. The sons of Palissy, wanting their father's genius, feebly sustained the reputation of his ware; they could produce nothing comparable to their father's exquisite designs. Whether they died, and took out of the world with them the mechanical secrets of their father's art, or whether the wits of Palissy found bread for yet another generation of descendants, it is now impossible to tell. The secret of Palissy soon perished, and of the feeble efforts of his sons the history of art retains no record.

It will not be necessary to recur to the subject of Bernard's labour as a potter. We have only to bear in mind, during the remainder of this narrative, the fact that Palissy, while he became prominent, during his last years, as a man of science, was also labouring industriously in his workshop.

It has been seen already that Palissy was, for a long time, known by those who had any acquaintance with him as a collector of natural curiosities. He speaks, incidentally, in his "Trustworthy Receipt," of the citizen of Rochelle, named l'Hermite, who made him a present of two foreign

shells ; of Pierre Guoy, citizen of Saintes, who found upon his farm a remarkable stone, and because he knew that Palissy was curious in such things, made a present of it to the potter. We are told, in the same way, of the Abbot of Turpenay, of La Mothe Fénélon, secretary to the King of Navarre—a wily and ambitious man, the same who was afterwards sent over to justify to the court of England the Massacre of St. Bartholomew—as lovers of letters, who had made presents of natural curiosities to Bernard, “knowing,” as the potter says, “in very good truth, that I was curious about such things.” Palissy had, in fact, been forming, and possessed, in the year 1575, a cabinet of natural history, calculated to illustrate very fully the philosophic views of nature which he had by that time matured. In the year 1575, the age of Palissy then being sixty-six, the potter had developed fully all those views of nature which we shall have presently to detail, and which make good his title to a very high rank among the philosophers of the sixteenth century. Before putting the final results of his researches into his last and most important book, he wished to make proof of their soundness, and to subject his reasonings to the severest test.

Modestly sensible of his ignorance of those languages in which was contained the learning of past time—believing, nevertheless, that he had pushed on his knowledge as a naturalist many steps into the future, he desired to know whether he might not, on some points, have deceived himself. It was quite possible that many things which he had thought out for himself had for a long time been familiar to the scholars ; it was quite possible, too, that positions which, to his mind, appeared incontrovertible, when exposed to the keen criticism of learned men might easily be controverted or destroyed. Such things were possible, though Palissy was not wanting in a strong conviction, on his own part, that his views were true. If false, they could not be too speedily demolished. Palissy, a true philosopher, saw in free discussion, strict inquiry, the true interests of science ; and he resolved, therefore, to invite about him the most learned scholars and physicians then residing in the capital, to meet them in his museum, to state to them his views, and illustrate his case as he went on, by specimens, rather than pictures or descriptions, of the things about which he spoke. He pro-

posed to invite interruption, contradiction, and discussion, at these lectures ; and he announced himself ready, at all times, to answer inquiries at his own house, and explain the specimens in his collection.

Palissy himself tells us that it was in the Lent of the year 1575 that he delivered his first course of lectures, which he proposed to continue annually. He was still delivering them in the year 1584. He delivered them in his museum. The collection of Palissy was the first cabinet of natural history that had been used more liberally than as a private hoard of curiosities in Paris ; and his were the first lectures upon natural history ever delivered in that capital.

They were no idlers to whom Palissy declared his views, and of whom he invited contradiction. There was assembled in the potter's cabinet an Academy of Science, a Royal Society evoked for the occasion. Bernard detailed the result of his original researches ; and the best men of the capital were there to discuss his arguments, and subject all he said to strict inquiry.

Bernard includes in his last work a list of some of the chief persons who attended his first series of demonstrations, and who declared themselves convinced of the reasonableness of his opinions. The philosopher, vigorous of mind and body, at the age of sixty-six exhibited no trace of bodily decay ; he was still noted, nine years afterwards, for his remarkably acute and ready wit ; and his age, when it was seventy-five, seemed little more than sixty. The vigorous old man, passing from the furnace and the chamber in which shelves and tables were resplendent with the rich creations of his fancy, went into his cabinet, and poured out the lessons he had learned by the road-sides, by the sea-shore, and among the mountains, before a grave assemblage of men paled by study, or grown grey with years.

Ambroise Paré was among them. He had been first-surgeon to four kings. He was a sturdy Huguenot. His fame as a scholar has descended to our own time ; and his skill as a surgeon, in saving Charles IX. from the danger that ensued upon a clumsy lancet-wound, caused him to be saved from the Massacre of St. Bartholomew. We will make acquaintance, briefly, with the chief attendants in the lecture-room of Palissy. Ambroise Paré, of the

body of Master Barber-Surgeons, was a man who certainly contributed much to the advancement of surgery in his own day, though there was an unprofessional want of dulness about him, which, taken together with his innovations in practice and his heresy in religious creed, made him an object of jealousy and stout abuse among the little and loud men who create the noise in a profession. Paré introduced the method of arresting the flow of blood after an amputation by the use of ligatures, in place of the actual cautery. Ligatures are now universally employed—the spouting blood-vessels are tied; but in the sixteenth century the custom was to burn them; and, when Gaspar Martin, the brother-in-law of Paré, died, after an amputation performed by Ambroise in his own way, a great triumph and exultation took place over the innovator. Paré was for three years surgeon to the Hôtel Dieu, in Paris. Between 1536 and 1543 he was surgeon to a troop of soldiers in the army of Piedmont. He then served as surgeon to companies under M. de Rohan and the dauphin. In 1544 he was with the king's army at Landrecy. In 1545 he was at Boulogne-sur-Mer with the army against the English. In 1552, still under M. de Rohan, he served in Germany; then he was at the siege of Damvilliers, by Henry II., and at Château le Comte, under Antony, afterwards King of Navarre; then he was in Metz during the siege. In 1553 he was in another besieged town; and on its capture, having been made prisoner of war, was sent home without ransom. In 1558 he was at the battle of St. Quentin; in 1562 at the siege of Rouen, at the battle of Creux, in which the Prince of Condé and the constable were taken prisoners, and at Bourges. He was at other battles of the civil wars, and at the siege of Havre. During the Lent of 1575 he attended the public demonstrations in the cabinet of Palissy the Potter.

The mind of Ambroise Paré, in the lecture-room of Palissy may now and then have wandered to a contest in which he was at that time engaged touching the republication in a body of his own surgical works. He had often thought it prudent to evade the discredit that attached in his day to bold views and innovations on the practice of the ancients, by publishing his tracts under fictitious names. Thus "Aparice" had represented "A. Paré, C."

—Ambroise Paré, Chirurgien. The doctors of medicine in Paris had obtained a decree in 1535 forbidding the publication of medical books until they had obtained the sanction of the faculty, and they were opposing at that time the independent publication of the surgical works of Master Ambroise Paré. Paré had brought his case for argument before the Court of Parliament, and therein the suit between Master Etienne Gourmelen, Dean of the Faculty of Medicine, and Master Ambroise Paré, Barber-Surgeon, remained undecided in the Lent of 1575.

By the side of Ambroise Paré, the surgical reformer and the Huguenot, sat his friend and less illustrious collaborator, Master Richard Hubert, commonly called, according to the usage of that time, Master Richard, Surgeon in Ordinary to the King. There was a goodly array, also, of grave physicians assembled in the lecture-room of Master Bernard. In the first place, there were Master François Choisin, Monsieur de la Magdalene, both physicians to the Queen of Navarre. François Choisin de Chatelleraut had become, only in the preceding year, licentiate of the Faculty at Paris, and while attendant upon Bernard's first series of lectures was engaged in the preparation of the thesis which he had engaged that year to sustain, upon the theory of periods in disease. Of this Master Choisin Palissy speaks, in his last book, as a lover of philosophy, "whose company and visits to me were a great source of consolation." We are told of a geological excursion in which Palissy was accompanied, in this year 1575, by Choisin, and a young scholar in medicine, twenty-two years old, named Milon. Milon also attended the demonstrations in Bernard's cabinet. He was a pupil of great promise, who afterwards became, in the year 1609, first-physician to Henry IV., who lived to write a book about the colic of Poitou, and to be apostrophised as—

"Tu Milo doctissime
Qui cuncta volvis mente perspicaci."

There were attendant also upon Master Bernard's first demonstration, Alexandre de Campege, physician to Monsieur the king's brother; Guillaume Pacard, a physician from Burgundy; Philebert Gilles, a physician, also out of Burgundy, whose mind was then revolving a

thesis upon epilepsy ; Germain Courtain, a venerable man, who publicly taught the arguments of Palissy concerning potable gold, as Doctor and Regent in the Faculty of Medicine ; Jean du Pont, and Messieurs Drouyn, Clément, Misere, and De la Salle, physicians from sundry parts of France, and Pierre Pena, of the same fraternity. Pierre Pena was an able botanist, born of a noble house in Provence, whose horoscope diverted him from arms to science. He studied with so much good effect that he became secret physician to King Henry III., and left at his death a fortune of six hundred thousand livres. He and his fellow-student, Mathias de Lobel, were doctors of Montpellier. Lobel saw much of the world ; he became physician to William, Prince of Orange, practised at Delft and Antwerp, was physician and "botanographer" to James I. of England, and died a Londoner in the year 1616. In conjunction with Mathias de Lobel, Pierre Pena had issued from the press of London, three or four years before the date of Bernard's lectures, a medico-botanical work full of research and erudition. It was—in Latin, of course—published in England, and dedicated to Queen Elizabeth, probably because its authors were both Protestants, who saw little hope of a calm hearing in their own distracted country.

There were present also at the lectures of Palissy, Messieurs Paiot and Guerin, apothecaries of Paris, and the Marquis of Saligny in the Bourbonnois, Knight of the Order of the King. Monsieur Dal Bene was there, with his brother the abbot, to whom Ronsard dedicated his "Poetic Art." Monsieur the brother of the abbot was called a poet in his time, and there remains of him a Latin distich, founded on the miserable state of France, in which the shortness atones barely for the want of special merit.

There was present also at the potter's demonstrations Jacques de la Primaudaye, of noble family in Anjou, who had shared with his brother Pierre in those instructions which gave rise to the publication, by Pierre, of a book called "The French Academy," within a year or two of the year 1577, with which this narrative is now concerned. An ancient gentleman of Anjou had received into his house four youths, of whom the Primaudayes formed two, and placed them under an accomplished teacher, who

provided pleasantly the pith of university instruction without the tediousness of detail, and the waste of time and words and labour that belonged in those days to a college education. They learnt Latin and Greek, moral philosophy and history; and the results of the lessons they received formed the thick volume called "The French Academy," of which an edition was dedicated, in the month of February, 1577, to Henry III., by Pierre de la Primaudaye. Jacques de la Primaudaye, so educated, was adding to his knowledge by attendance on the discussion in the cabinet of Bernard Palissy during the Lent of the year 1575. There were present also Master Jean Viret, an expert mathematician, then about thirty-two years old; Master Michel Saget, a man of judgment and good wit; Master Bartholomew, a prior, experienced in the arts, with other learned men, lawyers, scholars, and priests; among them Nicolas Bergeron, advocate, classical scholar and mathematician—a pupil of Pierre la Ramée, by whom he had been chosen to act with Antoine l'Oisel, and did act, in the year 1568, as testamentary executor in the founding of a public chair of mathematics in the Royal College of France.

Such were the men who gathered around Palissy, in what the Potter calls "my little Academy." Palissy placarded his proposed course of three lectures and discussions in the most frequented parts of Paris, charging a dollar for admission; and he promised, in his own quaint, fearless way, to return four dollars for every one that he received, if his teaching should admit decisive contradiction. His own account of the establishment of his lectures and demonstrations becomes very interesting when we recollect that it is an account of the first natural history lectures ever heard in Paris—of the first society established in Paris for the pure advancement of science, by discussions among learned men, which were to be held in the first natural history museum ever thrown open in that capital.

"I considered," Bernard says, "that I had employed much time in the study of earths, stones, waters, and metals, and that old age pressed me to multiply the talents which God has given to me; and for that reason, that it would be good to bring forward to the light those excellent secrets in order to bequeath them to posterity. But,

inasmuch as these topics are high and comprehended by few men, I have not dared to make the venture until, in the first place, I had ascertained whether the Latins had more knowledge of them than myself ; and I was in great trouble, because I had never seen the opinion of philosophers, to know whether they might have written upon the above-named things.

“ I should have been very glad to have understood Latin, and to have read the volumes of the said philosophers, to be informed by some, and to detect faults in others ; and thus debating in my mind, I decided to cause notices to be affixed at the street corners in Paris, in order to assemble the most learned doctors and others, to whom I would promise to demonstrate in three lessons all that I have learnt concerning fountains, stones, metals, and other natures. And in order that none might come but the most learned and the most curious, I put in my placards that none should have admission without payment of a dollar for the entry to the said lessons ; and I did that partly to see whether, by the help of my hearers, I could extract some contradiction which might have more assurance of truth than the arguments which I might lay before them ; knowing well, that if I spoke falsely, there would be Greeks and Latins who would resist me to my face, and who would not spare me, as well on account of the dollar that I should have taken from each, as on account of the time I should have caused them to mispend ; for there were very few of my hearers who could not elsewhere have extracted profit out of something during the time spent by them at my lessons. That is why I say that if they had found me to be speaking falsely, I should soon have been baffled ; for I had put in my placard, that if the things therein promised did not prove trustworthy, I would restore the quadruple. But, thanks be to God, never man contradicted me a single word. Which being considered, and seeing that I could not have more faithful witnesses, nor men more assured than those in knowledge, I have taken courage to discourse to you all these things, well testified, in order that you may not doubt that they are trustworthy. And, to make you yet the more assured about them, I will give you here a catalogue of the noble, honourable, and most learned men who were present at my lectures (which I gave in the

Lent of the year One thousand five hundred and seventy-five), at least of those whose names and quality I could learn ; who assured me that they would be always ready to bear testimony to the truth of all these things, and that they had seen all the mineral stones and monstrous forms which you have seen at my last lectures of the year One thousand five hundred and seventy-six, which I have continued in order to obtain an increased number of witnesses."

The character of the group which surrounded Bernard Palissy on these occasions we have already discussed. The character of the doctrines which Bernard, when they were supported by the good opinion of such friends, "took courage to discourse," we are about in the next place, to examine. They were collected in a book, and published at Paris in the year 1580, by Martin the younger, at the sign of the Serpent, opposite the College of Cambray. They represent the highest point attained by Palissy as a philosopher. By the progress of three centuries we have been brought to a position from which we can look fairly down on the thick clouds of ignorance out of which Palissy emerged, though we ourselves have reached an atmosphere by no means cloudless. From our advanced ground let us endeavour now to look back fairly on the science taught by the self-educated Potter, and compare, as we can, the views of Master Bernard with the philosophy before known to the audience, which for nine years represented annually at the demonstrations in his cabinet the wisdom of the day. Bringing the opinions of Palissy and those of his contemporaries both into requisite comparison with modern science, let us attempt to ascertain what claim the Potter had upon the admiration which he has obtained from men like Buffon, Haller, and Jussieu.

CHAPTER IV.

THE NATURALIST PUBLISHES, IN A LAST BOOK, HIS MATURED OPINIONS.

PALISSY published his third and last book—the second and last known to us with certainty—in the year 1580, he being at that time seventy-one years old. It was dedicated by him to his ancient friend and patron, who was then probably still older than himself, the Sire de Pons, the same who had interfered on his behalf, and assisted in procuring his liberation from the prisons at Bordeaux. The Sire de Pons, Count of Marennnes, had been admitted a knight of the order of the Holy Spirit at the promotion which took place in the year 1573. “To the very high and very powerful lord, the Sire Antoine de Pons, knight of the orders of the king, captain of a hundred gentlemen, and his majesty’s very faithful councillor,” Palissy writes his dedication in the manner following :—

“The number of my years gives me the boldness to tell you that one day I was considering the colour of my beard, which caused me to reflect upon the fewness of the days which remain to me, to end my course ; and that has led me to admire the lilies and the corn, and many kinds of plants, whose green colours are changed into white, when they are ready to yield up their fruits. Many trees also very soon look hoary when they feel their vegetative and natural virtues to have ceased ; a like consideration has reminded me that it is written, that one should take heed not to abuse the gifts of God, and hide the talent in the earth ; also it is written, that better is the fool who hides his folly than the wise man who conceals his wisdom.

“It is therefore a just thing and reasonable,” Palissy continues, dwelling on the spirit of that parable which formed the main-spring of his industry—“it is a just thing

and reasonable that each should seek to multiply the talent that he has received from God, following His commandment. Wherefore I have studied to bring into the light the things of which it has pleased God to give me understanding, according to the measure which it has pleased Him to bestow upon me, for the profit of posterity."

The book thus dedicated to Sire de Pons, and containing the mature fruit of the studies of the naturalist, bears the following title :—"Admirable Discourses on the Nature of Waters and Fountains, as well natural as artificial ; on Metals, on Salts and Salt-springs, on Stones, on Earths, on Fire, and on Enamels. With many other excellent Secrets of Natural Things. Also, a Treatise on Marl, very useful and necessary for those who are concerned in Agriculture. The whole drawn up in Dialogues, wherein are introduced Theory and Practice. By M. Bernard Palissy, Inventor of Rustic Figulines to the King, and to the Queen his mother." It was published at Paris, in one volume octavo, by Martin le jeune, at the sign of the Serpent, opposite the College of Cambray.

As the volume was passing through the press, however, a new thought suggested itself to the earnest-minded author, and a short notice was appended to the prefatory matter.

"Since the book has been put to press," adds Bernard, "several people have requested me to read it to them, in order that they might have more certain understanding of difficult parts, which has induced me to write what follows : to wit, that if after the printing of the said book, there should be any one who does not content himself with having seen the things privately in writing, and desires to have an ample interpretation, let him repair to the printer, and he will tell him the place of my abode, in which I shall be found at all times ready to read and demonstrate the things herein contained.

"Also, if any one should wish to establish a fountain, according to the design here given, and should be unable to understand clearly the meaning of the author, I will make a model for him, by which he will easily understand what is here written."

It is the same Bernard still. The uncaged energy with which the potter in his old age labours for the interests

of science, and the beautiful simplicity of mind with which he follows the directest path to a good object, remind us of the struggles of his manhood, and the eccentricity that made him acceptable meat for gossips when he hungered and grew lean over his work in Saintes.

Of the wisdom of the book, and Bernard's far advance beyond the science of his day, almost every page gives evidence.

He teaches the reason of the great differences that exist in the character and quality of springs. It is impossible, he says, that water can pass through the earth without taking up from it various salts that it contains; and as there are different kinds of earth in which the salts vary both as to quantity and kind, these differences will be represented in the waters. "I have never," he says, "seen a stranger come into the region of Bigorre to dwell there, who did not take soon afterwards a fever; one sees in the said region a great number of men and women who have the throat as large as two fists; and it is a certain thing that the waters have caused their malady, whether it be by their coldness or by the minerals through which they have passed."

The alternative of coldness in the water as a cause of goître Bernard adopts from Pliny, whose "Natural History" he quotes upon another point in the succeeding sentence. The suggestion that it is caused by matter taken from the earth and held by the water in suspension or solution is the theory of Palissy himself, and doubtless the correct one. He adduces goître as an example of the effect of waters altered in quality "by the minerals through which they have passed." The old belief that goître, Derbyshire-neck, or, as physicians call it, bronchocele, is produced by the use of snow-water, although not yet by any means dead, is yielding before a theory which Palissy was certainly the first man to suggest. Our own phrase for the disease—Derbyshire-neck—discredits the old notion very much. There is little snow water in Derbyshire and in the south of England where we find goître common. In Scotland, where there is snow, goître is a rare complaint. In Greenland, where all the water in use is snow-water, there is no goître at all; and there is a great deal of goître in Sumatra, where snow is never to be seen. In Switzerland there is a good deal of the

disease, but they who live at the greatest height upon the mountains, and depend most directly on the snow and the glaciers, are precisely the people among whom it is not found. The pump-water of the lower streets of Geneva brings on *goître* very speedily.

Palissy proceeds further to prove the existence in the earth of salts and other matters, by the instances of petroleum, of bitumen, of sulphuretted waters, and of waters tinted with the hue that belongs to the rocks from which they have issued. Theory declares himself to be contented with his arguments, and wishes to understand the cause of thermal springs. Palissy immediately, with a wonderful correctness of perception, ascribes these phenomena to the same cause which produces earthquakes and volcanoes.

The theory of the earth, by which it is regarded as a molten mass, cooling at the surface while it flies through space, was born long after the time of Palissy, and still exists. Sir Charles Lyell has shown that the central heat required according to the theory is incompatible with the solidity of the surface, and suggests the much more rational doctrine that, "Instead of an original central heat, we may perhaps refer the heat of the interior to chemical changes constantly going on in the earth's crust; for the general effect of chemical combination is the evolution of heat and electricity, which in their turn become sources of new chemical changes."

Palissy knew nothing of the heat generated by chemical combination, and was compelled to seek through his experience for some first cause of internal heat that lay within his comprehension. He suggested as a cause the falling or friction of one rock upon another in the neighbourhood of a bed of sulphur, coal, peat, or bitumen; thus a spark might be communicated to inflammable material, and a combustion would in this way be set up that would continue while it found material to feed upon. The water that passes in the neighbourhood of these beds would become heated, but not without producing great disturbance, for to the meeting underground of water, air, and fire—in truth, to the expansive force of steam and gases, although he was not able to grasp clearly the whole of his idea—Palissy ascribed all earthquakes. His doctrine on earthquakes and volcanoes—of which the true theory is

at this hour open to conjecture—is the best that human genius could have suggested in the year 1580.

How wonderfully all the speculations of Palissy upon this subject struck into the right path towards truth, and how far he had gone beyond the speculations of his own time, it is due to his memory to understand. In the year 1850, a work of authority, summing up the natural science of its time—Johnston's "Physical Atlas"—contained the statement following :—

"The real cause of volcanic phenomena is as yet, in a great measure, involved in obscurity. Two theories have been proposed to account for the phenomena ; one, that they are due to the expansion and oscillation of melted matter in the earth's interior ; the other (that proposed by Sir H. Davy), that the elementary earths and alkalies in their metallic states, coming in contact with water infiltrated through fissures, immediately commence a chemical action, and hence arises in consequence a great expansion of volume ; whilst the expansive force of vapour or gas, produced during the process of decomposition, increases the tension of the liquefied substance, until it acquires sufficient strength to overcome the resistance of the superincumbent mass, upheaves the solid earth, and finds for itself a permanent outlet. The mineral composition formed from the lava emitted, differs according to the nature of the materials of which the lava is formed, the degree of heat in the interior, the rate at which the molten mass is cooled down, and the amount of pressure to which it has been subjected."

In the year 1580, Palissy wrote the following opinion :—

"Earthquakes cannot be engendered unless in the first place fire, water, and air do come together. Some historians relate that in certain countries there are earthquakes which have lasted for the space of two years (a thing very easy to believe), and that can happen by no other means than the above named. It is necessary that before the earth can tremble there should be a great quantity of one of those four matters (sulphur, coal, peat, or bitumen) in combustion, and being in combustion, that it should have found in its way some receptacles of water in the rocks, and that the heat should be so great as to have power to cause the boiling of the waters enclosed in the rocks, and then from the fire, the waters, and the enclosed air, there will be engendered a

vapour that will come to lift by its power rocks, lands, and houses that shall be upon them. And inasmuch as the violence of the fire, the water, and the air, will be unable to cast to the one side or the other so great a mass, it will cause it to quake, and in quaking it will produce some subtle openings, which will give a little air, and by such means the violence by which otherwise all would have been overthrown is pacified ; for if the three matters which cause the trembling did not get a little air during their action there is no mountain so heavy that it could not be overthrown, as it has occurred in several places that mountains have by earthquakes been converted into valleys, and valleys into mountains by the same action.—Would you have me tell you the philosophic book in which I have learned these secrets? It has been nothing but a cauldron half full of water, in the boiling of which, when the water was urged a little briskly by the fire at the bottom of the cauldron, it rose until it flowed over the said cauldron ; and that could only be because there was some wind engendered” (wind, in the philosophy of Palissy, was air stirred by the removal of a compressing force) “in the water by virtue of the fire ; inasmuch as the cauldron was but half full of water when it was cold, and was full when it was hot.”

Contrast now this remarkable passage, in which the uneducated potter almost seizes half a dozen of the mysteries of nature, with the reasonings upon nature prevalent in his own time. We will pass even on into the next century, and take for our example no less a philosopher than Kepler, who published a work in 1619 on the “*Harmonics of the World*.” His opinions are thus epitomised by Cuvier : “The globe contains a circulating vital fluid. A process of assimilation goes on in it as well as in animated bodies. Every particle of it is alive. It possesses instinct and volition even to the most elementary of its molecules, which attract and repel each other according to sympathies and antipathies. Each kind of mineral substance is capable of converting immense masses of matter into its own peculiar nature, as we convert our aliment into flesh and blood. The mountains are the respiratory organs of the globe, and the schists its organs of secretion. By the latter it decomposes the waters of

the sea, in order to produce volcanic eruptions. The veins in strata are caries or abscesses of the mineral kingdom, and the metals are products of rottenness and disease, to which it is owing that almost all of them have so bad a smell." Even after the world had passed into the eighteenth century, science was in many respects far behind the point that had been reached by Palissy. In 1708, Scheuchzer is found maintaining, in the *Mémoires* of the Academy, that God lifted up the mountains in order to drain off the waters of the deluge, and that they were made strong in order that they might stand properly upright.

Palissy then, having assigned to thermal springs their true position in connection with volcanic action, proceeds to discuss their medicinal use. He explains that the medicinal use of springs will vary according to the medicinal matters which they may have taken up from the earth; that some may be useful in one case, some in another; but he ridicules all extravagant expectation. A practical physician of the present day could not speak more soberly or sensibly upon the subject, although long after the days of Palissy the most ludicrous credulity was prevalent, even among the learned, upon the subject of the virtue that resides in springs. A reference to the early records of our Royal Society, contained in the first numbers of the "*Philosophical Transactions*"—dating nearly a hundred years after the time of Palissy—will give us plenty of grave details on baths that possessed the virtue of conferring health or beauty. One writer considers negroes to have been blackened by subterranean steams.

Palissy points out that these subterranean steams and thermal springs which issue from the earth act as safety-valves, and tend to abate the violence and frequency of earthquakes. "There is no violence," he says, "or quaking where the fire can take breath by little holes, though they be as in some places they are seen, no bigger than worm holes. In the same way it happens with that which heats the water of the baths, because it takes breath by the channel of the said waters." The best comment upon this opinion will be a passage from the best modern work upon the subject of which Palissy is treating. "Steam of high temperature," says Sir Charles Lyell, "has continued, for more than twenty centuries, to issue

from the 'stufas,' as the Italians call them; thermal springs abound not only in regions of earthquakes, but are found in almost all countries, however distant from active vents. It is probably to this unceasing discharge of subterranean heat that we owe the general tranquillity of the globe; and the occasional convulsions that occur may arise from the temporary stoppage of the channels by which heat is transmitted to the surface."

Up to this point the doctrines of Palissy contained in the present treatise display a philosophy that is entitled to our high respect. He is, upon all subjects that are connected with a study of nature, a century or two in advance of the men of his own time. The opinions narrated in the present chapter have, however, chiefly represented truths almost attained, rather than regions of knowledge absolutely conquered. In the next and most interesting portion of the essay, we find Palissy teaching the true doctrine of springs, propounding for the first time to the world a great cosmical idea with absolute correctness, and proving his position by a train of the best and purest philosophical reasoning. The reasoning of the artisan, written in unassuming French, fell among pedants, and produced no fruit. The practical application of his theory to a system of water-supply, by surface-drainage, forms the concluding portion and main object of his essay. He had prefaced it, he says, with an exposition of the views of nature upon which it was founded. "Because it is impossible to imitate Nature in any point whatever, if we have not first contemplated the effects she produces, taking her for guide and exemplar, since there is nothing in the world wherein perfection can be found, excepting in the works of its Creator. Taking example then by those beautiful formularies which He has left to us, we come to the imitation of the same."

Bernard's doctrine on this head, as we shall presently perceive, does not form one of his least important claims upon the recollection of posterity.

CHAPTER V.

DOCTRINES OF PALISSY: THE FOUNTAIN AND THE FLOOD.

SPRINGS were supposed, long after the time of Palissy, to be supplied by secret conduits from the sea, which carried sea-water to reservoirs in mountains. The water in the reservoirs being then vaporised, ascended and condensed upon the cavern walls, to trickle through the crevices of rock pure and distilled, as water that has been distilled from an alembic. Descartes is sometimes called the author of this theory ; he certainly supported it ; but that it was not of his invention will be obvious enough from the fact that we find Palissy disproving the same notion as an opinion common among the philosophers in 1580, sixteen years before Descartes was born.

In the "New Dictionary of Natural History," an encyclopædia of existing knowledge on that subject, published in very many volumes between the years 1816 and 1830, M. Patrin writes the article on springs. After narrating "the most popular theory, that of Descartes," he declares it to be an error. Springs, he says, are caused by condensation of vapour, chiefly in the night, upon the tops of mountains. They are produced by the trickling down of the water in a way that corresponds entirely with the trickling down of drops that have condensed on cold glass bottles. So little notice did the poor man speaking simple French obtain among the Latinist philosophers of his own day ; so little was philosophy cherished by the French themselves during that age of civil discord, that the theory of springs, expounded perfectly and very beautifully by Master Bernard of the Tuileries in the year 1580, perished of neglect ; and in a work of great pretension published by French naturalists a quarter of a

thousand years after the demonstrations in the cabinet of Palissy, the true theory of springs was still unknown.

By his immediate hearers Bernard's doctrine was accepted ; and a few men, who read his books before they passed from obscure fame into unmerited oblivion, made practical use of his suggestions. But by the body of his countrymen in his own day, the character of Palissy as a philosopher was not appreciated. He was one or two—now and then even three—centuries in advance of his own time, so that his own time had not ears to hear him with. Moreover, France was busy upon other matters, and had no leisure to think for half a minute about springs of water, while there prevailed a more engrossing interest in pools of blood.

"When for a long time," says Bernard, "I had closely considered the cause of the sources of natural fountains and the place whence they might proceed, at length I became plainly assured that they could proceed from or be engendered by nothing but the rains."

THEORY replies : "After having heard your opinion, I am compelled to say that you are a great fool. Do you think me so ignorant that I should put more faith in what you say than in so large a number of philosophers who tell us that all waters come from the sea and return thither ? There are none, even to the old men, who do not hold this language, and from all time we have all believed it. It is a great presumption in you to wish to make us believe a doctrine altogether new, as if you were the cleverest philosopher.

"PRACTICE.—If I were not well assured in my opinion, you would put me to great shame ; but I am not alarmed at your abuse or your fine language ; for I am quite certain that I shall win against you and against all those who are of your opinion, though they be Aristotle and the best philosophers that ever lived ; for I am quite assured that my opinion is trustworthy.

"THEORY.—Let us come then to the proof. Give me some reasons by which I may know that there is some likelihood in your opinion.

"PRACTICE.—My reason is this : it is that God has fixed the borders of the sea, beyond which it shall not transgress ; as it is written in the Prophets. In effect we see this to be true, for inasmuch as the sea is in several

places higher than the earth, while, at any rate, it has some height in the middle; yet at the extremities it keeps within measure by the command of God, in order that it may not come to submerge the earth.

“We have very good witnesses of these things, and among the works of God that is greatly marvellous; for if you had taken heed to the terrible effects of the sea, you would say that it appears to come from twenty-four hours to twenty-four hours twice to assail the earth, desiring that it should be ruined and submerged. And its coming is like to a great army which might come against the earth to combat it; and its front, like the front of battle, breaks impetuously against the rocks and limits of the earth, bringing a noise with it so furious that it seems bent upon destroying all. And because there are certain channels on the borders of the sea in the surrounding land, some have built mills on the said channels, to which there have been made several gates for allowing sea-water to come into the channel at the rising of the tide, in order that whilst coming it may cause the said mills to grind, and when it is about to enter the channels, finding the gate closed, and having no servant fitter than itself, it opens the gate, and causes the mill to grind for it a welcome. And when it wishes to retire, like a good servant, it shuts for itself the door of the channel, in order to leave it full of water, which water is made afterwards to pass out by a narrow opening, so that at all times it may cause the mill to grind. And if it were as you say, according to the opinion of the philosophers, that the sources of springs came from the sea, it must needs follow that the waters would be salt, like those of the sea, and, what is more, it would follow that the sea must be higher than the highest mountains, which is not the case.

“*Item.* As it happens that the water which has entered the channels and causes the mills to grind, and which conveys the vessels into many and divers channels to load salt, wood, and other things found on the borders of the sea, is obedient in following the main army of the sea, which has been skirmishing against the earth. In like case, I say that it must needs be that the springs, rivers, and brooks should return with them; and they must needs also be dried up during the absence of the sea, even as the channels are filled by the coming of the tide and dry

up in its absence. See now whether your good philosophers have any argument sufficient for the overthrow of mine. It is a very certain thing, that when the sea has retired it discloses in many places more than two full leagues of sand, on which we may walk dry-foot ; and we must believe that when it is retreating, fishes retreat with it. There are some kinds of shell-fish, as mussels, cockles, oysters, and many kinds which are made in the form of a snail, which do not deign to follow the sea, but trusting in their armour, they that have but one shell fasten themselves to the rocks, and the others that have two remain upon the sand. Some kinds of these, which are formed like a knife-blade, being about half a foot long, have taken the precaution to conceal themselves within the sand, and then the fishermen go out to seek for them. It is a wonderful thing, that the oysters being brought to a distance of ten or twelve leagues from the sea, perceive the hour in which the returning tide approaches the spot on which they had their abode, and open of themselves to receive aliment from the sea as though it still were near them. And because they have this habit, the crab, knowing well that they will present themselves with open doors when the tide shall return into their neighbourhood, lurks near their habitations, and when the oyster shall have parted its two shells, the said crab, to deceive the oyster, takes a little stone, which it puts between the two shells, in order that they may not close, and this done, he is able to make his repast upon the said oyster. But the mice have not found out the reason why the oyster has two shells ; for it has happened in many places distant from the sea, when the oysters felt the hour of the tide and opened as I have before said, the mice finding them open would come to eat them, and the oyster feeling the pain of the bite would close firmly its shells, and in this way many mice have been taken, for they had not put stones between the two shells like the crab. As for the large fish, the fishers of Xaintonge have invented a good way of deceiving them ; for they have planted upon certain spots in the sea many large thick poles, and in these they have fixed pulleys to which they attach the cords of their nets, and when the sea has retired they let their nets lie on the sand, leaving however the cord to which they are attached holding by its two ends to the said pulleys. And when the sea re-

turns the fishes come with it and seek pasture on one side and the other, giving themselves no concern about the nets, because they swim above them ; and when the fishermen see that the tide is on the point of turning, they raise their nets to the height of the water, and they being attached to the said poles, the bottom of the said nets is held down by several stones and lumps of lead which keep them firm below. The mariners having stretched their nets and raised them in this way, wait until the tide shall have gone down, and as the tide recedes the fishes seek to follow as they are accustomed ; but they find themselves deceived, inasmuch as the nets stop them, and by this means they are taken by the fishermen after the tide is down.

“And in order not to wander from our purpose, I will give you another illustration. It must be held for a certain fact that the sea is as high in summer as in winter, and if I were to say more I should not speak untruly, because the marshes are highest during the full moon of the month of March and that of the month of July ; at which times it covers more lands in the maritime parts of the Xaintonic islands than at any other season. If then it were true that the sources of springs come from the sea, how could they be dried up in summer, since there is not at that time less sea than in the winter ? take notice of this proposition, and you will perceive that if the sea nourished with her teats the fountains of the universe, they never could be dry in the months of July, August, and September, at which times an infinite number of wells become exhausted. I must needs again dispute against you and your Latin philosophers, because you find nothing good if it does not come from the Latins. I tell you for a general and certain rule, that waters never can mount higher than the sources from which they proceed. Do you not know well that there are more fountains on the hills than in the valleys : and even if it were true that the sea is as high as the highest mountain, still it is impossible that fountains on the hills could proceed from the great flood of the sea ; and the reason is, because in bringing water from a higher place to make it mount up to another place equally high, it is essential that the channel by which the water passes should be so well closed that nothing can escape ; otherwise the water having descended into the valley would

never remount into high places, but would escape by the first hole that it could find. I will therefore at once conclude that if the sea were as high as the mountains, its waters could not arrive at the high parts of the mountains whence the springs proceed. For the earth is full in many places of holes, cracks, and gulfs, by which the water that might flow from the sea would escape into the plain by the first holes, springs, or gulfs it could find, and before it rose to the summit of the mountains all the plains would be engulfed and covered with water ; and that the earth is so pierced the continual fires which proceed from the abysses bring with them sulphurous vapours that bear testimony, and but one hole would suffice, or a single crack, for the submersion of all the plains."

To the statement that if spring-water came from the sea it would be salt, Theory opposes the general belief that it is purified in passing through the veins of earth. Palissy, on the contrary, replies : " It is much more to be believed that the salt of the sea comes from the earth, having been carried thither as well by the current of rivers which empty themselves therein, as by the impetuous waves which violently strike against the rocks and salt-containing earths. For you should note that in many countries there are rocks of salt. There is some author who has written in his works that there is a country in which the houses are built of blocks of salt ; which being considered, you must seek more legitimate arguments if you would have me believe that the waters of springs and rivers proceed from the sea.

"THEORY.—And I pray you then to make me understand your own opinion, and whence you think that they can come if they do not come from the sea.

"PRACTICE.—You must believe firmly that all the waters that are, shall be, and have been, were created in the beginning of the world ; and God wishing to leave nothing in idleness, commands them to go to and fro and be productive. This they do without ceasing, as I have told you the sea does not cease to go and come. In like manner the rain-water that falls in winter remounts in summer to return again in winter, and the waters and the heating of the sun, and the dryness of the winds striking against the earth raises a large quantity of water, which, being collected in the air and formed into clouds, are sent

out to all corners of heaven as the heralds of the Lord. And the winds moving the said vapours, the waters fall again upon all parts of the earth, and when it is God's pleasure that the clouds (which are nothing else than stores of water) shall dissolve, the said vapours are converted into rains which fall upon the earth.

"THEORY.—Verily I find out now that you are a great liar, and if it were true that sea-water could be raised up into the air and fall afterwards upon the earth, it would be salt rain, so there you are caught by your own arguments.

"PRACTICE.—That is very badly theorised on your part; do you think to take me by surprise upon this point? You are far out in your reckoning. If you had considered the manner in which common salt is made, you would never have put forward such an argument, and if the truth were as you say, no salt ever could be made. But you must understand that when the salt-makers have put the sea-water into their reservoirs, to cause it to congeal under the influence of the sun and wind, it never would congeal at all were it not that heat and wind raise the sweet water which is mingled with the salted. And when the sweet water has exhaled, the salt residue creams and congeals. In that way I prove that the clouds raised from sea-water do not contain salt. For if the sun and wind exhaled the salt-water from the sea, they could also exhale that which is used for salt-making, and then it would become impossible to make salt. There you have your arguments destroyed.

"THEORY.—And what shall become then of the opinion of so many philosophers that springs or rivers are engendered of a thick air, which proceeds from below the mountains, from certain caverns which are in the said mountains, and they say that this air becomes thick and some time afterwards dissolves and changes into water, which causes the source of springs and rivers?

"PRACTICE.—Do you understand fully what you say, that it is an air which thickens against the vaults of caverns, rocks, and that this dissolves into water? Grant that it is so; at any rate it seems to me that the manner of speaking is improper. You say that it is a thickened air, and then it resolves itself into water. It would then be water similar to that of which I say that it is raised, of

which we speak as clouds. * * * I do not deny that the waters enclosed in the caverns and abysses of the mountains can exhale against the rocks and vaults which overhang the said abysses ; but I deny that this is the whole cause of the origin of springs ; it is so far from it, that if you consider how since the creation of the world there have continually proceeded from the said mountains springs, rivers, and brooks, you will easily understand that it is impossible that the said caverns could supply with water for a year, or for a month, as many rivers as flow daily down. * * * I do not deny that the watery vapours from the subterranean caverns may contain a large quantity of water ; but it must necessarily have been placed and carried thither by the posts and messengers of God, that is to say, the winds, rains, storms, and tempests, as it is written, that they are the heralds of the justice of God. The waters, then, in caverns have been placed there by the rains engendered as well of waters that have risen from the sea as of those from the earth and from all humid things, in the drying of which their aqueous vapours are raised up on high to fall again. And thus the waters do not cease to ascend and descend ; as the sun and the moon have in their action no repose, in like manner the waters never cease to labour in engendering and producing, going and coming, as God gave to them commandment."

Palissy, having in the next place pointed out the hard texture of rocks and mountains, by virtue of which they serve as a skeleton under the softer earth, proceeds to the fuller elaboration of his views. They are quite accurate and philosophical ; and never did a naturalist—unaffected and clear-sighted as most naturalists are—unfold the results of his observation with more exquisite simplicity.

"Having taken this consideration," Palissy says—he has been speaking of the hardness of the rocks—"into your memory, you can understand the reason why more springs and rivers proceed from the mountains than from the remainder of the earth ; which is no other thing than that the rocks and mountains retain the water from the rains, as they might be held by a brazen vessel. And the said water falling upon the said mountains over the earths and clefts, always descend, and are not stopped until they have found some spot grounded with stone

or rock tolerably close-grained or condensed ; and then they rest on such a bottom, and having found some channel or other opening, they peep out in fountains or in brooks and rivers according to the nature of the opening to the receptacles ; and inasmuch as such a source cannot run contrary to its nature on the mountains, it descends into the valleys. And though the beginnings of the said sources coming from the mountains can scarcely be large, there comes to them aid from all parts, by which they are aggrandised and augmented ; and especially from the lands or mountains which are to the right and left of the said sources. * *

“ Let us come now to the reason why there are not water-sources in the lowlands and plains as in the mountains. You should understand that if all the earth were sandy, loose, or spongy, like the cultivable lands, water-springs would not be found in any place whatever. For the rain-waters falling on the said earths would descend ever lower and lower towards the centre, and could never remain anywhere to make either wells or springs. The reason why water is found, whether in wells or springs, is no other than because they have found a floor of stone or argillaceous earth, which can hold water as well as stone ; and if any one seeks water in sandy soils, he will not find it unless there be under the water some clay, stone, slate, or mineral, by which the rain-water is stopped upon its passage through the earth. You may tell me that you have seen several springs proceeding out of sandy soils, or even out of sand itself : to which I answer, as above, that there is below some floor of stone, and that if the spring rises higher than the sand, it comes also from a higher ground.”

Palissy, having thus demonstrated the cause of springs, is about to pass to the practical application of his knowledge, when he remembers one or two more arguments against the prevailing notion that fountains are supplied by channels from the sea. When the sea retires, he says, the channels emptied of sea are, nevertheless, not empty : they contain air. If, then, the channels be perfectly closed, how is the air to escape before the sea on its return, since the sea cannot pass in unless air passes out ? “ I have another singular illustration,” he adds, “ and it shall be the last on this head, which is, that in the

districts and islands of Xaintonge bordering the sea, there are sundry small towns and villages with both sweet and salt wells; one may see clearly, thereby, that the wells of which the water is salt are supplied by the sea, and the wells of sweet water which are near the salt wells and also near the sea, are supplied by the runnings of the rain that come from inland parts. And what is more, and well to be noted, there are sundry little islands environed and surrounded by the water of the sea, even some of them do not contain an acre of dry land, in which there exist wells of sweet water; this makes it certain that such wells have not their course on the spot, nor from the sea; but from the flow of the rains traversing the earth until they have found a bottom, as I have already said."

The rest of the essay Palissy devotes to practical ideas; there occur, however, in the course of it two more philosophical suggestions. The difference in the size of springs he accounts for by the different distance which the waters may have flowed underground before they found an outlet, and by the greater or less extent of surface from which they have received the drainage. The continuance of springs during the dry weather he explains by pointing out that the process of percolation through the earth is very gradual, and that the supply of one rainy season can thus set in before the supply left by the last season is quite exhausted.

On the subject of artificial fountains the doctrines of Palissy are in the highest degree ingenious. They are founded on a strict imitation of the ways of nature. The landlord who has on his estate a rock or mountain, should regulate its drainage, by stopping up with masonry all crannies and wild outlets for the water, aiding here and there with a few artificial channels, and so managing that the rain passing through the surface-soil should all drain downward to one point at the base of the mountain. In order that the flow of water may not be impetuous or destructive in a time of heavy rain, Bernard suggests that its course through all larger channels should be obstructed by great stones, and that, as further barrier, as well as by way of profitable investment, trees should be planted over the whole mountain side, and plants encouraged to grow under their shade. The water collected at the base of

the hill in a large reservoir, is to filtrate through a bed of sand into a second reservoir, and into a third if convenient, which will be the fountain, and which may be decorated at pleasure. The water is to be drawn by a tap, and a second tap over a small receptacle is to supply pure water when it is needed for the use of cattle. When the house is somewhat far from the gathering-ground, the water is to be brought from the reservoir in pipes.

On level ground where there is no mountain, each landowner is taught how to make a gathering-ground for his own private use. Selecting a field, he is to give a slope to it of about four feet, by carrying the earth from one end to the other. He is then to pave his sloping field with stone, or slate, or clay, and at the bottom of it make his reservoir. But there is no need that he should make no other use of his gathering-ground. Having established the impervious base, planting trees in it, and leaving a little room round their stems, he may cover it with cultivable soil, and plant a field through which the rains will percolate, and under which they may run slowly down into the reservoir. From the reservoir, through a sand-filter to the fountain, the water will pass as in the other case.

In districts where there is no stone, nor clay, the inclined field may be made of beaten earth turfed over, and shaded from the sun by surrounding trees. The network of grass-roots will form a floor, and the rain-water will run down such a slope, towards the artificial fountain.

Theory objects to Bernard, that his reservoirs for surface-drainage are mere cisterns. Palissy replies, that they have a fair right to be called natural springs, because they are formed in the same way. "I have said to you that they resemble natural fountains in all points but two; the first is, as I have said, that nature is assisted, just as sowing corn, training and cutting vines is aid to nature; the second is of greater weight, and cannot be understood unless you have in mind the former part of my discourse, and having understood that properly, you will be able to judge by the proofs I have alleged, that none of the natural fountains can produce water of the good quality of which you can be so assured as of the quality of that which I have taught you how to make. The reason is, as you may have seen, that the whole earth is full of dif-

ferent kinds of earths and minerals, and that it is impossible that water passing by the conduits of the rocks and veins of the earth should not bring with it some salt or hurtful mineral, which cannot happen with the fountain of which I have instructed you. Then you know well that it is a general rule that the lightest waters are the best: I ask you is there water lighter than that of the rains? I have told you already how they have risen before they descended, and that happened through the power of a warm exhalation: now the waters which have risen can contain in themselves but little earthy substance and still less of mineral. And this water which has so lightly ascended by exhalation, descends again upon ground which you know well to be free from mineral or hurtful matter." If, therefore, says Palissy, any difference in name is to distinguish his fountains from those which flow without assistance, he would call those wild fountains, "just as fruit-trees which grow naturally in the woods are called wild: and being transplanted are softened and improved for use. And if you would understand better that rain-waters are the lightest, and in consequence the best, question a little the dyers and the sugar-refiners, they will tell you that the rain-water is best for their business and for many other things."

The practical principles taught by the shrewd potter in this treatise, are precisely those in which sanitary writers are at this day busily endeavouring to instruct the public. The system of surface-drainage taught by Master Bernard has been applied among us only during the last few years, and is slowly coming to be regarded as the best means of providing for the water-supply of all large towns. The opinions recorded in 1580 by Master Bernard of the Tuileries, found a complete echo nearly three hundred years afterwards in the report of the General Board of Health on the supply of water to the metropolis, issued in 1850. Our Board of Health has been not less decided in its censure of well-water, than Bernard Palissy was in his own day. The Board, after pointing out, as Palissy had pointed out, the admixture of foul matter with the wells of towns, told us that "deep well-water is free from these surface animal and vegetable impurities, but it has generally more of mineral impurity" (so taught Bernard)

"and is usually unattainable in sufficient quantity at a moderate expense." In Bernard's time that last objection had especial force, and was dwelt upon by the potter, as we have seen, with ample emphasis. The Board gave copious evidence which it declared to be "conclusive in favour of the adoption of the principle of soft-water supply by means of gathering-grounds." The idea of its gathering-grounds it adopted from "the new practice in Lancashire," and the new practice in Lancashire is, in effect, that which Bernard taught two hundred and seventy years ago. "The new practice in Lancashire has been," the report of the Board informs us, "to take some elevated ground, generally sterile moorland or sand heath, and to run a catch-water trench or conduit round the hill, midway, or as high up as may be convenient for the sake of fall, regard being had to the space of the gathering-ground. An embankment is thrown across some natural gorge, at the nearest point at which a reservoir may be formed without the expense of excavation. Into this the rain-water is led and stored, having in many instances been previously filtered.

The secrets he had gathered from devout communion with nature, Bernard did not hide. He told them as he could; he called the learned men about him in his cabinet, and placed his self-taught knowledge freely before them; he wrote it down plainly in his mother tongue and printed it, and scattered it in print. He declared himself ready to be visited in his own house and answer questions, or give more abundant explanations of his doctrines to any man by whom they were desired. To the utmost limit of his energies, and they were great, by ordinary and by extraordinary means, the humble artisan endeavoured to diffuse his knowledge. His efforts were unsuccessful. France in that miserable age could not attend to science, and they who praised the ingenuity of Master Bernard of the Tuileries, were most concerned to wonder that it should be displayed by a man ignorant of Greek and Latin. There would have been a hearing for the naturalist out of France if he could only have spoken to the world in what was then the universal tongue of science; he would have won also more respect in his own country. But Bernard could write only in his mother tongue words whose extreme simplicity and ease discredited his claim

to rank as a philosopher. So, were an eagle to be nested among owls, the owls might look upon him as a clever though eccentric bird ; but they would pity him for wanting gravity of aspect, and censuré his perverted taste for flying out into the daylight.

CHAPTER VI.

DOCTRINES OF PALISSY: ALCHEMY AND THE ORIGIN OF METALS.

BROUAGE, a small town, with a harbour, is situated on the coast among the marshes of Saintonge. It was built upon ground rescued from the sea by Jacques, a Sire de Pons, under the reigns of Charles VII. and Louis XI. The town having been fortified by this Jacques, was named after him Jacqueville, or Jacopolis, soon afterwards corrupted into Jaques Pauly. It was a prosperous salt-marsh district, and the name Brouage indicates its nature, being taken from a Celtic word, "brou," meaning marshy soil. The town of Brouage, not far from the old home of Palissy, in Saintes, had undergone two sieges during the civil wars: the last in the year 1570. Saintes also had been besieged, and the whole district of Saintonge was trampled down repeatedly by combatants. The town of Brouage, when besieged, had suffered much from want of water. Remembering this fact, and being most familiar with the district, Palissy adds to his essay upon waters and fountains an "Advertisement to the Governor and Inhabitants of Jaques Pauly, otherwise named Brouage," to explain to them that the situation of their town is suitable for the supply of their want by surface-drainage at a very small expense.

Having completed the statement of his Theory of Springs, and the application of his theory to practice, Palissy devotes a page or two to a short essay—always, of course, using the form of dialogue—upon the bore in the Dordogne. If it were caused by the opposition of the tide, he does not see why it should take place only at one time in the year, and why it should not take place in the Garonne also, since both rivers flow into the same estuary. These questions he had pondered on the Bec d'Ambez,

the narrow point of land between the confluence of the two rivers ; and he endeavours to explain a difficulty that was in his day perfectly inexplicable, by the suggestion of an ingenious idea. This little essay contains, also, a notice of the stormy passage of Maumusson among the islands of Saintonge, named by Rabelais among the most dangerous spots on the French coast. Here, also, Palissy had looked on thoughtfully, and taught himself how waves are lifted by the friction of the wind.

After briefly noticing these matters, the venerable potter bends his white hairs over the paper, and prepares his pen for a more delicate investigation. A bold attack on alchemy in France during the sixteenth century, could not fail to give a great deal of offence, since alchemy was practised by physicians, nobles, even kings. Bernard was not likely to speak otherwise than boldly, but he was not willing to offend an entire class of men, which included many of his patrons and familiar friends. The treatise upon alchemy and metals is preceded, therefore, by this notice "To the Reader," which is set up by way of lightning-conductor, to divert whatever flashes of wrath his work might otherwise bring down upon his head.

"Friend reader, the great number of my days and the diversity of men has made me acquainted with the divers affections and opinions, more than can be named, existing in the universe ; among which I have found the opinion of the multiplication, generation, and augmentation of metals, more inveterate in the brains of many men than any of the other opinions. And because I know that many seek for the said knowledge without a thought of fraud or malice, but because of an assurance they have that the thing is possible, that causes me to protest by this writing that I do not at all propose to blame three kinds of persons. That is to say, the nobles who occupy their minds by way of recreation, and without being incited by a desire of unlawful gain. The second are all kinds of physicians, who desire to understand the ways of nature. The third are they who have the means, and who believe the thing to be possible, and would not on any account make evil use of it. And because I have undertaken to speak against thousands of others who are unworthy of such knowledge, and totally incapable, on account of their ignorance and slight experience. Also because they have

not the means of supporting the losses which ensue, they are constrained to cheat with external dyes and sophistications of the metals. For these reasons I have undertaken to speak boldly, with invincible proofs, I say invincible to those of whom I speak ; and if there be any one who may have effected so much by his labour that he has moved the charity of God to reveal to him such a secret, I do not mean to speak of such persons ; but on the contrary, inasmuch as the capacity of my own mind cannot fit itself to the belief that such a thing is possible, when I shall see the contrary, and truth shall vanquish me, I will confess that there are no people more hostile to science than the ignorant, among whom I shall not be at all ashamed to place myself in the first rank, in as far as concerns the generation of metals. And if there be any one to whom God may have distributed this gift, let him excuse my ignorance ; for according to that which I believe I am about to put my hand to my pen, to pursue that which I think, or to express it better, that which I have learned with very great labour, and not in a few days, nor in the reading of a set of books, but in anatomising the womb of the earth, as may be seen by the discourse which follows."

It will be seen that Bernard took much pains in writing this apologetic note, and that his remodelled sentences are here and there left incomplete. The potter, though his genius spreads a great charm over his writing, was probably not ready with his pen ; he says of himself, in his treatise on alchemy, that he "could write neither Latin nor Greek, and scarcely French." The consciousness of technical defects, and the necessity of labouring for that union of extreme clearness and brevity essential to the fit communication of his philosophical views in print—before the invention of book-making—caused Palissy to take great pains over his composition. We know that he did this, because by some accident the printer received duplicate sheets of manuscript belonging to one portion of the treatise upon alchemy. Of these sheets one was a corrected version of the other ; and Palissy appears not to have detected in good time that the printer had used them both, one in its proper place, the other tacked to the conclusion of the treatise. A comparison of these two pieces shows how carefully the potter laboured to

overcome what he regarded as the drawback of his "rustic style."

Once engaged upon his subject, Palissy, of course, proceeds to speak his mind without reserve; his only care is to speak clearly. His treatise is upon metals and alchemy. He suggests modestly his own theory of the formation of metals; for of the generation, augmentation, and congelation of metals, to which alchemists pretend, he says, "it is a work done by the command of God, invisibly, and of a nature so very occult that it was never given to a man to know it." Against alchemy the potter uses all the power of his reason.

In regarding Bernard as a chemist, we must of course remember that the main truths of chemistry began to bud in our own century, and that in the time of Palissy the seed from which they were to come was scarcely planted in the minds of the philosophers. Palissy did not decry alchemy in its decline. In 1681—exactly a century after the publication of Palissy's discourses—Beccher wrote of chemists as a strange class of mortals, impelled by an almost insane impulse to seek their pleasure among smoke and vapour, soot and flame, poisons and poverty. "Yet among these evils," he says, "I seem to myself to live so sweetly, that may I die if I would change places with the Persian king. My kingdom is not of this world. I trust that I have got hold of my pitcher by the right handle—the true method of treating this study. For the pseudo-chemists seek gold; but I have the true philosophy, science, which is more precious than any gold." So Beccher was proud to write a hundred years after the time of Palissy; and when we remember that the Phlogistic Theory—a false but serviceable notion—was not propounded until that time, having, indeed, Beccher and Stahl for its establishers, we must not expect more than shrewd perceptions in the best chemical theory that could have been propounded by the wit of man in the year 1580. The simple doctrine of the opposition between alkali and acid was not at that time known. It was first taught by Francis de la Boe (a Sylvius), who was born, thirty-four years afterwards, in Amsterdam.

Chemists in the time of Palissy supposed that there were four elements, and three principles, salt, sulphur, and mercury. Of sulphur and mercury were made the metals.

This theory of the origin of metals Palissy disproved. It should be well remembered that the origin of metals is at this day unknown to chemists ; they have not yet been decomposed ; and we escape from our difficulty by saying that each metal is an element in itself, though we more than suspect that this also is a theory that better knowledge will explode. Until our own great chemist, Faraday, in very recent years, gave definite direction to our thoughts, by pointing out the relation that subsists between ore-producing veins and the magnetic currents in the earth, we had no light to aid us in discovering the origin of metals. We say that they were made in the beginning, and accordingly will be found in the end ; so said the philosophers in Bernard's time of rocks. So said Palissy of nothing. In his scheme of philosophy the universe is never idle ; animal, plant, and mineral alike are working always to fulfil the benevolent designs of God. He knows no idle substance in creation.

In endeavouring to account for the formation of metals, he observes, in the first place, that when pure, they are found deposited in a crystalline form. After many years' reflection on the origin of crystals, Bernard tells us how, "One day somebody showed me some tin ore that was thus formed in points ; another time there was shown to me silver ore still cleaving to the rock, in which the substance of the said silver had been congealed, which ore was also formed in diamond points. When I had considered all such things, I understood that all stones and kinds of salt, marcassites, and other minerals, of which the congelation takes place in water, contain in themselves some form, whether triangular, quadrangular, or pentagon, and the side which is in the earth and against the rock cannot have any form but that of the surface on which it reposes at the time of congelation."

Palissy was acquainted, from observation, with the mode in which substances were slowly deposited from water in the crystalline form. He was aware of the contained water of crystallisation, "the crystalline water which has some affinity with the generative water presently to be spoken of." Palissy shows, throughout, a knowledge of the fact, that crystals of the same substance are constant in their form, although this fact was not recognised in science before the year 1669, and

crystallography was unknown as a science upon which reasoning was to be founded until the time of Haüy, in 1780, two centuries after the publishing of Bernard's book. Palissy ascribes, in several places, the formation of crystal to the tendency existing among homogeneous particles to come together and cohere. "I know well," he says, with a glance forward into unknown regions of chemistry, "that these things have some power of attracting one another, as the loadstone attracts iron. Also I know well that sometimes I have taken a stone of fusible matter, that after I had pounded and ground it as fine as smoke, and having thus pulverised it, I mingled it with clay; some days afterwards, when I was about to labour on the said clay, I found that the said stone had begun to collect itself again, although it was so subtly mingled with the clay, that no man could have found a stone so big as the little atoms that we see upon the sunbeams entering a chamber, a thing at which I marvelously admired. That will induce you to believe that the matter of the metals collects and congeals wonderfully, according to the order and the wondrous power which God has ordained."

Crystals, then, being deposited in water, and containing water, native metals being at the same time deposited in a crystalline form, Palissy considered that he could not err in considering all metals to have been deposited from water. He confirmed his opinion to the hearers in his cabinet, by producing wood impregnated with metal, and shells that likewise have assumed metallic form, "of which shells," he says, "I have seen some quantity in the cabinet of Monsieur de Roisi. For my part I have one which I showed to the master-mason of the fortifications of Brest, in Lower Brittany, who attested to me that there were many like it to be found in that country. In the cabinet of M. Race, a famous surgeon of this town of Paris, there is a stone of metallic ore, in which there was a fish of the same substance. In the region of Mansfeld are found a great number of fishes reduced into metal." Another piece of tangible evidence produced by Bernard at his lectures, was a lump of slate in which there was contained a metallic crystal, slate itself being evidently a subaqueous deposit. He cites also, in support of his opinion, the fact of water being found abundantly in

mines. "One day Antony, King of Navarre, commanded to pursue the vein of some silver mines that had been found in the Pyrenees. But when a small quantity of ore had been extracted, the waters that were found compelled the overseers of the mines to abandon all. And you know well that many mines have been abandoned for that reason."

Having determined, then, that metals were deposited from water, in which no man ever saw them in nature visibly suspended, Palissy laboured to discover how this deposit could take place. He solved his difficulty by the suggestion of another element. Since the crystals, he says, form in the midst of common waters, refusing to have affinity with them in their congelation, any more than fat, oils, and other matters that will separate themselves from the common water; we must conclude, then, that the water of which the crystal is formed, is of a kind different to common water; and if it be of a different kind, we must assure ourselves that there are two waters, the one exhalative, the other essensive, congelative, and generative, which two waters are intermingled one with another in such a manner that it is impossible to distinguish them, until one of the two has been congealed.

Having defined the affinity which unites bodies different in kind, and the attraction which is a "supreme power that draws together things of the same nature"—having pointed out some of the first principles of crystallography, Palissy proceeds to account for various phenomena by means of his fifth element, the water of crystallisation, the germinative or congelative as opposed to the exhalative or common water. This matter, flowing occult with every stream, contains the germs of scents, flavours, and divers properties of things afterwards to be developed. In the seed, says Palissy, are the germs of future leaves and branches, colours, odours, and fixed shapes of leaf and flower, all which things it draws out of the earth; not more wonderful, says Bernard, is his fifth element—the congelative water, which he supposes to be the germ of minerals and salts. This water, that is to be obtained also from crystals, is obtained from straw and vegetative matter; it is this which enters into the composition of animal bodies, which are full of fluid, and were born in fluid, to increase their substance.

Against the objection that the manner of this action is incomprehensible, Palissy adduces other wonders equally beyond comprehension and yet true. For example, he says, "I have seen at the time when glass-painters were in great request, because they painted figures in the windows of the temples, that they who painted the said figures did not venture to eat garlic or onions; for if they had eaten any, the painting would not hold upon the glass. I knew one of them named Jean de Connet, because he had an offensive breath, all the painting that he made upon glass would in no way be made to hold firm, although he was accomplished in his art." Again: "I have seen a woman modest, wise, and honourable, who, when her husband was in the country, felt by some secret movement the day on which her husband would return."

Against the alchemists Palissy objects that it is an error to attempt the formation of that by fire which nature forms by water. He bids them pound an acorn and by art attempt to rebuilt it, or pound radiant shells and mould them again into a glorious cup of the like lustre. Such things are less difficult than to create gold.

In speaking of shells rainbow-hued, Palissy shows that he did not, like his contemporaries, look upon the rainbow as a simple wonder in the sky. "I considered," he says, "that the cause of the rainbow could only be that the sunlight passed directly across the rains that are opposite the sun: for one never saw a rainbow to which the sun was not opposite, also one never saw a rainbow through which the rain was not falling."

The arguments of Palissy against the alchemists it is not necessary in the present day to reproduce.

Of the absurdity of the belief that by the philosopher's stone gold could be multiplied a hundredfold, Bernard had an extremely keen perception. To the assertion of his antagonist, that he had with his own hand, under the direction of an alchemist, doubled a piece of silver money, Palissy answers with the exposition of a common fraud. A second piece of metal had been fastened by wax to the end of the rod with which the cauldron had been stirred, and the wax melting, had left the silver at the bottom of the pot. Other frauds Bernard exposes, and especially dwells upon the large quantity of bad money that had

been put into circulation by men who carried on the business of coiners under the cloak of alchemy. "There was a false coiner (of Béarn) taken in the diocese of Xaintonge, on whom were found four hundred counters ready to be marked, no jeweller or other man would have supposed their metal to be bad. For they answered like good coin to the hammer and the flame, were right in touch and tone. But when they were tested the fraud was discovered. At that time there was a provost at Xaintes, named Grimaut, who assured me that in proceeding against a coiner the same gave him the names and surnames of a hundred and sixty men, who were his fellow-tradesmen, together with their ages, qualities, and abodes, and other certain marks of recognition. And when I inquired of the said provost why he did not cause the apprehension of the said coiners named upon his list, he replied to me that he dared not undertake it; because there were in their number many judges and magistrates, as well of the Bordelois and Perigord as of Limousin; and that if he had ventured to annoy them, they would have found means to put him to death."

Of the facility and skill with which delusions might be practised, Palissy gives this illustration: "The Sieur de Courlange, valet-de-chambre to the king, knew many such artifices, if he had cared to use them. For one day happening to discuss these things before King Charles the Ninth, he boasted by way of jest, that he would teach him to make gold and silver, to experiment upon which matter he commanded the said Courlange to prepare for the work promptly; this was done, and on the day of trial the said De Courlange brought two phials full of water, clear as spring-water, which was so well prepared that on putting a needle or other piece of iron to steep in one of the said phials it became suddenly of the colour of gold, and the iron being steeped in the other phial became of the colour of silver: then quicksilver was put into the said phials, which suddenly congealed; that of one of the phials taking a golden colour, that of the other being like to silver: of which the king took the two lumps and went boasting to his mother that he had learned how to make gold and silver. And all the while this was a deception, as the said De Courlange has told me with his own mouth."

Palissy tells also of the devices by which alchemists endeavoured to hatch gold, by exposing their materials to a slow, continued heat, resembling that of incubation. Some placed the fire at a distance from their would-be golden eggs, and conducted the heat through a flue with many doors, by which to regulate the temperature. Others used the heat of a lamp, with a wick perpetually equal, and hoped that in the end this would produce the attainment of their object. "I say," Bernard tells us, "that some have waited many years—witness the magnificent Maigret, a learned man of great experience in these matters, who nevertheless being unable to come by his desire, boasted that if the wars had not put out his lamp before the time he should have found the alcahest."

As a last illustration of the views of Palissy upon the subject of alchemy, we may refer to his opinion on the subject of the advantage to be derived even if five or six Frenchmen really did discover the philosopher's stone. "I have been told," urges Theory, "by several alchemists, that if they could succeed they would make gold enough for"—a good sixteenth-century ideal of the use of a great deal of gold—"for carrying on the war against all adversaries and even against the Turks."

Palissy replies to this: "I tell you on the contrary that we had better have in France a plague, a war, and a famine, than six men who could make gold in such abundance as you say. For after all had been assured that it was possible to make it, everybody would despise the cultivation of the earth, and would study to find out how to make gold, and in this way the whole land would be left fallow, and all the forests of France would not supply the alchemists with charcoal for six years. They who have studied histories say that a king having found some gold mines in his kingdom, employed the chief part of his subjects in extracting and refining the said metal, which caused the lands to remain fallow, and famine to arise in his dominions. But the queen (as being prudent and moved with charity towards her subjects) caused to be made secretly capons, pullets, pigeons, and other viands of pure gold, and when the king would dine, she caused these viands to be served, whereat he was glad, not understanding the point at which the queen was aiming; but seeing that no other food was brought to him he began

to lose his temper, seeing which the queen supplicated him to consider that gold was not meat, and that he would do better to employ his subjects in the cultivation of the ground than in the search for gold. If you are not convinced by so good an example, consider within yourself and be assured that if there were, as you say, six men in France who knew how to make gold, they would make so large a quantity thereof that the least of them would wish to establish himself as a monarch, and they would wage war with each other, and after the secret had been divulged, so much gold would be made that none would be willing to give in exchange for it bread or wine."

From potable gold Bernard passes on to mithridate, the enlarged version of a receipt supposed to have been found by Pompey in the tent of Mithridates. There was a supposed antidote to poison (perhaps used really as an antidote against malaria), composed of salt, figs, almonds, nuts, and rue-leaves; and there was also a formidable prescription, including fifty-four items. This prescription was enlarged afterwards, on the occasion of a plague, to a conspiracy against the stomach of some three hundred drugs, invented by a council of physicians. Against this absurdity, and the whole practice of making long prescriptions, buttressed as it was by the confidence of the profession, Palissy battered arguments, and with the arguments he brought, as usual, into the field a light troop of apt illustrations, well equipped and furnished by his ready wit. The scent of a bouquet containing many fragrant flowers is inferior, he says, in delicacy to the fragrance of a single blossom; the meat of capons, pigeons, partridges, pounded together would not have so good a flavour as the meat of one of them alone; azure, vermilion, green, and other colours, rubbed into a mass, yield an unsightly compound; so also many properties of medicine combined into a lump yield a result which cannot be foretold, and which will be of less value to the physician than a medicine containing only one or two ingredients judiciously selected.

A dispute which Palissy had maintained with some learned friends, one winter's day, while standing by the Seine, opposite his workshop, next occurs to his mind, and suggests a brief essay. Its subject is the formation of ice, and Palissy maintains by argument that it

is formed on the surface of the water, and that it does not, according to a common belief, form under water and ascend. The question remained subject to debate even in the beginning of the nineteenth century. Then follow essays on salts and on common salt. The next dialogue, one of the most important of the whole, is that upon stones. Between this and the elaborate treatise upon marl, with which the book concludes, are an essay upon clays, and the account of his struggles as a potter, of which use has already been made in the biography. The dialogues upon stones and marl detail the latest views of Palissy on many points connected with geology and vegetable physiology.

Let us first understand the position of geological science in the time of Palissy. Its first principles will be found laid down in his treatise upon stones; elsewhere, they appear scarcely to have been suspected. The earth, it was supposed, had been made in the beginning, and there was little to learn by studying its structure. Fossil marine shells, on mountains and elsewhere, were certainly extremely curious—formed, probably, by a sportive plastic influence descending from the stars, or by a formative power in the body of the earth; certainly not relics of animals, but imitations of them, sports of nature. The strong arm of the Church held back every bold suggestion that might be supposed by short-sighted ecclesiastics to throw doubt on the authority of Moses. The hills which skirt the range of the Apennines are very full of fossils, and protested strongly against the old plastic doctrine to the eyes of sensible observers. The authority of this doctrine was therefore openly questioned by individuals in Italy from time to time, before a doubt had suggested itself to naturalists in any other country. The painter Leonardo da Vinci, who died in 1519, was the first who is known to have asserted that the petrified shells had contained living animals. "They tell us," he writes—"they tell us that these shells were formed in the hills by the influence of the stars; but I ask where in the hills are the stars now forming shells of distinct ages and species?"

Fracastoro, on the occasion of excavations at Verona, in 1517, exposed the absurdity of the theory of plastic force, and said that the Mosaic deluge was too transient

to be the cause of so peculiar a dispersion of the shells. Andrea Mattioli, on the other hand, was less clear-sighted, and called the petrifications, fatty matter fermented by heat.

Faloppio, of Padua, considered them to be generated by fermentation, or a tumultuous movement of terrestrial exhalations. He was a professor of anatomy, but he believed the tusks of elephants found in the soil to be mere earthy concretions, and even regarded buried vases as fortuitous impressions in the soil.

Mercati, who described, a few years before the publication of Bernard's book, fossils preserved in the Vatican by Sixtus V., called them stones shaped by the influence of heavenly bodies. He, however, who makes a catalogue for a pope, must needs abide by the scientific opinions of the Church. Many men of science had at that time adopted the opinion of Cardan, and these opinions had spread even into France. Cardan, however, was behind Fracastoro in his views, for while he considered fossil shells to be the remains of living animals, he ascribed their dispersion to the Mosaic deluge.

In France, during the latter days of Palissy, the Church, the ignorant mass, and the bigoted in science, looked upon fossils in the old way, as sports of nature ; the more enlightened followed the opinion of Cardan ; against both Palissy contested. But the opinions even of Cardan were suspected by the orthodox ; and Palissy, passing beyond them to more enlarged views, was the first man, as Fontenelle declared, a century and a half after his death, in the French Academy—"the first who dared openly assert in Paris that fossil remains of testacea and fish had once belonged to marine animals."

Jerome Cardan, whose opinion that the position of fossils is due to the Mosaic deluge Palissy justly controverts, was a most famous Milanese philosopher, who wrote upon judicial astrology, physics, and morals. He is said to have starved himself, in the same year in which Bernard's book was published, in order to fulfil a prediction that he should die at the age of seventy-five. He did die at that age, in the year 1580, but the legend of his suicide is certainly an error. He was a man of quick wit and warm blood, as he notifies to the world by publishing among his works, instead of whispering to the Church, his confession.

Palissy then stood equally opposed to the geology of the Church and the geology of Jerome Cardan. To understand the position of the potter's doctrines in the history of science, we must remind ourselves again of the state of knowledge long after his death. When Steno the Dane wrote, in 1669, on solids within solids, he was much opposed, for the belief still continued to be prevalent that fossils were not animal or vegetable remains. A hundred years after the time of Palissy, the most extravagant notions on the subject of petrifications are broached in our own "Philosophical Transactions." There is no want of faith here in their animal origin, but the faith wants measure. Reference is gravely made to "*Helmont de Lithiasi*, where, among other Remarques, is recited the Testimony of a Petrified Child seen at Paris, and by the owner used for a Whetstone," and to other things "perhaps not well enough attested by Authors, concerning the stupendious Petrifications of whole Companies of Men and Troops of Cattle, by Aventinus, by Purchas in his Pilgrimage, and (of a troop of Spanish Horsemen) by Jos. Acosta."

Palissy was too shrewd a philosopher to manifest credulity. In speaking of the cause of petrification, he says guardedly, as for the petrification "of man, I have never seen it; but I have the good testimony of a respectable physician, who tells me that he has seen in a gentleman's cabinet the foot of a man petrified. One Monsieur Salles, living in Paris, has assured me that there is a German prince who has in his cabinet the body of a man in great part petrified." He leaves these facts as he has heard them, and goes on to say that it is quite possible that if a man were buried where his body could become impregnated with stony matter in the proper way, such petrification would take place.

The way in which petrification takes place, as described by Bernard is correct enough; explanations of the process in the language of our own day differ in little but in terms, and scarcely show more knowledge than Palissy possessed. The fifth element, congelative water, or as Bernard often calls it, salt, is of course a prime agent in the process. Let us distinctly understand what Bernard means by his fifth element. When common salt, sugar, saltpetre, and many other substances, are mixed

with a fit quantity of water they dissolve. They disappear entirely. If they were merely held in suspension, they would be visible in little particles throughout the fluid; but by dissolving, they have entered into a relation with the water, much more wonderful than our familiarity with the phenomenon would often suffer us to think it. A glass of water thus containing matter in solution which has not affected its colour or fluidity, is to the eye water in every drop. Well-water which contains a large quantity of lime is clear, fluid, and sparkling. The lime is in the water in a fluid form, and not distinguishable from water.

This mystery Palissy expressed to his understanding by saying that solid matter, flowing as water in water, existed in the distinct state of a congelative water, whose purpose in the economy of nature was of vast importance, and which he called therefore a fifth element. Every substance that can be deposited from solution in water was, in the eyes of Palissy, a salt. The duty of this congelative water was, at the command of God, to penetrate by virtue of its fluid form along the roots into the stems of plants, and there congeal into a solid matter for their increase; to penetrate the strata of the earth, and deposit matter which should cause the growth of stones and so forth. Palissy uses as terms often convertible the phrases salt and congelative water. From congelative water many kinds of salts are deposited. "Salts," Bernard says, have some *affinity* together. The salt of the dead body being in the earth exercises *attraction* on another salt, which will be of another kind, and the two salts together might harden and transform the body of a man." Again, "I am quite sure that if the body of a man were interred in a place wherein there is some dormant water among which there is congelative water, which forms crystal and other metallic and stony matters, that the said body would petrify; because the congelative germ is of a salsitive nature, and the salt of the body of the man would *attract* to itself the congelative matter, which is also salsitive, because of the *affinity* that is between the kinds, they will come to congeal, harden, and petrify the human body."

Palissy is speaking, in these passages, of the possible petrification of a human body by the same process which he describes as causing the conversion into stone or metal of wood shells, and other organised productions. It will

be seen that his theory is good, and that his fifth element or congelative water is a theoretical formula which might have been adopted for a time with very great advantage to the progress of philosophy. It is the name for a true thing, which Palissy saw in its true place in the economy of nature. The preceding extracts will also sufficiently illustrate the way in which Palissy makes the term salt a convertible term with his congelative water; they also happen to contain examples of the way in which Palissy used the words affinity and attraction, and brought such powers into play. We find in the works of Palissy the first example of the employment of these words in so philosophical a sense.

Enough has been said to indicate the way in which Palissy accounted for the existence of fossilised matter. Against the idea that fossil shells had been scattered abroad by the deluge, Palissy produces all those decisive arguments which would of course not escape his penetration. For example: "I will show you presently the picture of a rock in the Ardennes near the village of Sedan, in which rock and many others are to be found shells of all the kinds depicted on this piece of paper; from the summit to the foot of the same, although the said mountain is higher than any of the houses or even the bell-tower of the said Sedan, and the inhabitants of the said place daily hew the stone from the said mountain to build, and in doing so the said shells are found as well at the lowest as at the highest part, that is to say, enclosed in the densest stones; I am certain that I saw one kind that was sixteen inches in diameter. I ask now of him who holds the opinion of Cardanus, by what door did the sea enter to place the said shells in the middle of the densest rock? I have already given you to understand that the said fishes were engendered on the very spot where they have changed their nature, keeping the same form that they had while living." This opinion of Bernard's was a bold leap out of darkness into light, from ill-regulated guesses into rational geology.

It will have been observed that in the preceding extract Bernard is found producing a picture of the rock which he takes as an illustration, and paintings of all the species of shell that it contained. Bernard was enthusiastic in his study of geology; and while the bent of his

genius was towards generalisation—a thirst for the great truths of nature, towards which all science must tend—no man ever saw more clearly the importance of observing accurately the minute facts out of which alone great principles can be extracted. With marvellous acuteness, Palissy saw the importance of a detailed study of fossils to the discovery of geological truths. Modern geology and all its grandest results are, in fact, founded upon a minute study of fossil forms. The first who pursued this study with discriminating zeal was Palissy, the self-educated potter, who had put himself to school with Nature. He assigned to himself the task of taking copies of all the fossil forms he saw, in order to compare and study them. His studies in this direction soon made him aware of the large number of extinct forms of life included in the list of petrifications. “I was desirous,” he says, “of reducing or representing by picture the shells and fish which I had found lapified, to distinguish between them and the customary sorts of which the use is common; but because my time would not permit me to put my design in execution while I was in deliberation upon this, having deferred for some years the above-named design, and having always sought according to my power more and more for petrifications, I at length found more fishes” (using the word fishes, of course, not in the modern scientific sense) “and shells in that form, petrified upon the earth, than there are modern kinds inhabiting the ocean * * for which reason I have been bold enough to say to my disciples that Monsieur Belon and Rondelet had taken pains to describe and figure the fishes found by them during a voyage to Venice, and that I considered it strange that they never troubled themselves to understand the fishes that formerly dwelt and multiplied abundantly in regions of which the stones, that have congealed at the same time when they were petrified, serve now as register or original of the forms of the said fishes.”

How well Palissy consulted this register, whose value he was first to recognise, may be best understood by the conclusions drawn from it. From a study of the shells of Paris, he declared—and it is needless to say that he was first to declare—the former existence in that region of a great lake or basin of water.

The complete scheme of modern geology derived from a study of fossils was, of course, beyond human grasp in the sixteenth century ; but in every direction the keen sight of Palissy had indicated to him the true paths to better knowledge. Where even the bold spirit of Palissy did not venture to assert that open sea had been, in the depths of the mountains, he accounted for the fossils by the theory that there had been receptacles of water, filtering among the chinks and caverns of the rocks, from which salts were deposited, which passed away and left rock in their place. That every fossil became fossil where it had originally lived and stirred ; that every water animal had been deposited from water, and was included in the petrification of its mud and the congelative part of the water itself, Bernard taught emphatically. At the same time, he pointed out that the number of land and fresh-water shells is very great, and that all shell-deposits, therefore, were by no means to be ascribed to either salt water or fresh water in every case. In speaking of marine shells, Palissy calls attention to the great mass of shells formed in the sea, and formed out of sea-water, which must therefore have contained in solution the material of which they are formed—that is to say, in a state not distinguishable from water itself, in the state of congelative water, his fifth element.

In the treatise upon marl, we find Palissy fulfilling his promise to inquire into that useful manure, and enunciating again many truths which he had learned on the subjects of agricultural chemistry and vegetable physiology. These subjects had not been studied in the time of Palissy, although other departments of botany had made some progress. Botany grew faster in her childhood than the sister sciences.

Though Pliny, who was no observer, continued long to be botanist in ordinary to the world, many real advances were made in the sixteenth century towards the acquisition of independent valuable knowledge. Pliny was popular because he treated of the properties of plants, and that suited the feeling of the learned in an age of herbals. Plants were at first studied only for the cures they might be able to perform. Antonius Brasavoli, who wrote a book on simples in the year 1556, was the first who established a botanical garden. It was situated on the

banks of the river Po. A few years earlier, Otho Brunfels, of Mentz, was the first modern who published figures of plants drawn from nature, but not arranged according to any systematic plan.

Jerome Bock, a German, who translated his name into Hieronymus Tragus, published a herbal in 1551, which contains the first indications of an attempt at natural arrangement, and succeeds so far as to bring into respectable groups the labiate, cruciferous, and composite plants.

In the year 1565, Conrad Gesner, of Zurich, in a letter to Zuinger, writes in terms that entitle him to the distinction of being the first to distinguish genera by the character of the fructification. "Tell me," he says, "whether your plants have fruit and flower as well as stalk and leaves, for these are of much greater consequence. By these three marks, flower, fruit, and seed, I find that Saxifrage and Consolida Regalis are related to Aconite." Gesner, we are told by Haller, was the first establisher of a museum. The formation of collections is, however, a natural taste which must have arisen simultaneously among educated people. We have found Palissy referring to the cabinets of physicians and nobles in his own time familiarly and as usual things. Palissy was the first by whom such a collection was thrown open to the public, and employed as part of the machinery of teaching. Gesner—who lived between the years 1516 and 1565, has been called (in compliment as well as disrespect the world likes to call names) the Pliny of Germany—was a naturalist who contrasted with Palissy, by being as curiously full as Palissy was empty of the learning of his time. By spare diet and rigorous employment of his hours Gesner acquired a marvellous amount of erudition. He understood Greek, Latin, and Hebrew; he had a smattering of Arabic, and was familiar with French, German, Italian, and Flemish. He compiled a voluminous history of animals, and a bibliographical work called the "Universal Library," containing the names and particulars of all scientific works published by the moderns in his time. He was a pious, modest, and pure-hearted scholar, who, when the plague extended to Zurich and laid a finger on his shoulder, leaving there a monitory spot of purple, took the hint quietly, and retiring to his study,

occupied himself in the final arrangement of his writings. Thus he was found by death, a man verging on fifty, who had lost few minutes since he ran alone upon the world. Gesner, however, studied in printed books, while Palissy spent equal labour and a longer life over the handwriting of nature. The potter also had a genius equal to his industry.

Three years after the publication of Bernard's last book, Andreas Cæsalpinus, of Arezzo, a learned man, whose profound knowledge of Aristotle did not impede his power of original research, published at Florence sixteen books "*De Plantis*." In his book plants were arranged according to an arbitrary system, but with so much skill that they fall practically very often into natural arrangement.

These facts indicate that in the science of botany more progress had been made than in other departments of natural history in Bernard's time. The potter himself did nothing towards systematic botany. He was a minute observer, as the devices upon which he laboured in the pottery bear witness; but his great curiosity was directed to the reasons of things, and to the application of whatever knowledge he obtained to useful ends. He was perpetually asking "Why?" over the results exhibited by nature. And when he had found out why, he inquired further, "What good use can I make of this knowledge?"

"If you would contemplate," he says, "the reason why the roots of trees are so crooked, you will find that it is only because, as men look for the mountains, roads, and by-paths that are easiest of passage, so roots in their growing seek the easiest, softest, and least stony passages through the earth; and if there be any stone before a root it will leave the stone upon its way, and turn to the right hand or to the left; inasmuch as it could not pierce the stones that lie upon its way. As for the forking and the crookedness of the branches, that springs from another cause, which is that when the branches are pushing out their young shoots, each seeks the freedom of the air, and they dilate and separate from one another as much as they can, in order to have air at command."

In another passage we find Palissy recommending exploration of the soil, discussing stratification, and revealing the principle and practice of boring Artesian wells.

It is said that these wells were first bored in Artois long before the time of Palissy. Some doubt the antiquity of the practice. The principle is contained in the following passage from the "Treatise upon Marl." Palissy speaks of the search for marl. "I think the soil might be pierced easily by rods, and by such means one might easily discover marl, and even well-waters which might often rise above the spot at which the point of the auger found them ; and that could take place provided they came from a place higher than the bottom of the hole that you had made." This is certainly the first statement of the true theory of Artesian wells. It is a corollary from Bernard's theory of springs.

Theory might well ask, looking back upon the whole body of doctrine taught by the old potter in the last years of his life—

"Where have you found all this written? or tell me in what school you have been, from which you might have learned what you are telling me."

"PRACTICE.—I have had no other book than the heavens and the earth, which are known of all men, and given to all men to be known and read. Having read in the same I have reflected on terrestrial matters, because I had not studied in astrology to contemplate the stars."

CHAPTER VII.

THE REWARD OF THE PHILOSOPHER.

THE lectures in which Bernard Palissy explained the doctrines of which a brief outline has now been given, were commenced, as we have already seen, early in the year 1575, when Palissy was sixty-six years old. They were still being delivered in the year 1584. Very few months before the commencement of these lectures, Charles IX. had been succeeded by his brother, Henry III., the third of the sons of Catherine of Medicis who in succession occupied the throne of France. The reign of this king covered the last years of the life of Palissy, and in this reign the troubles of France again created trouble for the potter.

It might, indeed, have been trouble enough for the old man if there had been no direct interference of the state with his career; it might have been trouble enough to live in Paris in those days, and teach what he had learnt from solemn communing with nature in the midst of vice, frivolity, and riot. Since the time of Francis I. the court of France had been like a neglected ulcer, growing daily a more loathsome object of regard. If Henry, when at the age of twenty-three he came from the throne of Poland to the throne of France, brought any cleanness with him, he brought it among lepers, and was rapidly polluted by their contact. There was reason to hope well of him. As Duke of Anjou he had been made a general at the age of fifteen, and won two battles—at Jarnac and Montcontour—before the coming of his beard. Then he was King of Poland, and at the age of about twenty-three he became King of France. At the beginning of his reign, the neutral Catholics joining the Huguenots made one side of a civil war. We have passed over many years of politics which did not concern Bernard Palissy; the state

of France during the interval may be inferred from the fact that this, which began in the reign of Henry III., was the fifth civil war—a languid struggle, for the vigour of the country was exhausted.

Since the Massacre of St. Bartholomew, the mobs of Paris had become familiar with blood, and the whole temper of society had taken an aspect of increased ferocity. Assassination was the common end of a dispute. Cosmo Ruggieri, a Florentine astrologer, ministered largely to the superstition of all classes, and was regarded as a professor of the art of poisoning. Tortures and executions were frequent, at which Charles IX. had been in the habit of assisting with his presence; and Henry III. followed the example of his predecessor. From such scenes the eyes of women were not averted. Women were courted with fierce mockeries of passion; love-letters were indited in the writers' blood; and in the intense corruption of the public morals, the king and his court, wearied with complaisance, created women out of men. Courtiers wore feminine attire, had earrings fitted into their ears by the king, or by some chosen friend or lover, took presently the name of mignons—minions—and devoted themselves to the utmost wickedness and folly. Confusion filled the kingdom throughout the entire reign of Henry III.; hand after hand threatened to drag him from the throne into a coffin or a monastery. Now and then the king appeared to be aroused, and with a skilful stroke he at one time turned the tables on his adversaries; but then he sank again into the filth of his court, and yielded up his manhood. "The fire was dead on the hearth of his heart, and the fiercest gale," says D'Aubigné, "could only set the ashes flying."

The king and the young nobles, in the grounds and lower chambers of the Louvre, ran races, leapt ditches, tried pistol-shots and poniard-points. He was proudest who could talk most loudly, whether with or without truth, of his feats as a seducer or assassin. Ridiculously curled, and tricked out with stiff, affected garments, the king and his friends were to be seen frequently shouting through the streets of Paris, capering at fairs, insulting traders, always with a poniard ready. The young men affected wild attachments to each other, called each other by affected names; and when a Pythias was absent on a

trivial journey, his Damon would wear mourning and refuse meat. Or they would quarrel. The Seigneur St. Phal pointed out an embroidered Z upon a garment ; the Seigneur Bussi, by way of picking up a quarrel and enhancing his own credit as a bully, affirmed that it was no Z, but a Y. They challenged each other, and kept up for years upon this point a remorseless feud. Another noble, high in the king's favour, under some provocation pierced the body of his wife, destroying her with unborn twins. The Duke of Guise, Le Balafré, the murderer of Coligny on St. Bartholomew's-day, and a degenerate son of the duke who died before Orleans, pursued a victim, poniard in hand, into the presence of the king.

The Duke of Guise was the unworthy idol of the extreme Catholic party, to which, since the Day of St. Bartholomew, the town of Paris had most heartily belonged. It was desired to create this duke into a king, at the expense of Henry ; and had not the duke wanted steadiness of purpose, the desire would probably have been accomplished. The tumult of a violent party pressed the Duke of Guise sometimes to the very steps of the throne, while as for Henry, the record of his character is in his journal. There one reads that, "In spite of all the affairs of the war and the rebellion that the king had on his hands, he commonly went in a coach, with the queen, his wife, through the streets and houses of Paris to take the little dogs that pleased them ; went also through all the nunneries in the environs of Paris, to make the like search for little dogs, to the great regret of those who had them."

In the year 1585, this king, finding no other way of saving himself from the imminent danger in which he was placed by the extreme Catholic party, put himself at the head of their league, and issued a decree prohibiting the future exercise of the Reformed worship on pain of death, and banishing all those who had previously adhered to it.

Palissy was then an old man of seventy-six, still teaching philosophy, and still superintending his workshop in the abandoned palace of the Tuileries. In his lectures and in his book, Bernard abstained from all allusion to the struggles of the time. He preserved his religion pure, but turning from the horrors of the civil strife, in which Scripture texts were written upon flags, and psalms sung

to the roll of drum, he abstained wholly from religious controversy. He was known, however, as a Huguenot, and no royal ordinance could alter his convictions, or drive the sturdy potter, in alarm, out of the way that he had chosen as the way of truth. It was said, therefore, of the old man, "He regardeth not thee, O king, nor the decree that thou hast signed;" and Palissy was sent to the Bastille.

Sentence of death, executed upon many who remained unmoved in their worship by the king's decree, was delayed, in the case of Master Bernard, only by the artifice of friends in power, and chiefly the Duke of Mayenne, who caused all possible delays to interrupt the suit against him.

Four more years of life remained to Palissy, all spent within the four walls of his prison. After a time, two fair girls, daughters of Jacques Foucaud, attorney to the parliament, condemned like Bernard for their firm religious faith, shared with the potter his captivity. The old man and the girls sustained each other, and awaited death together.

Outside the prison-doors France was in tumult. News came to Paris of the gallant exploits of the little band of knights and soldiers led by Henry, King of Navarre, and his friend Sully. Poor enough in purse, and with a little army, the King of Navarre was dashing with an unexpected strength into the tide of the war, a hero to the Protestants. The Duke of Guise remained the hero of the violent among the orthodox. He scarcely dared be king. A conclave, called the Sixteen, formed itself on his behalf into a wild species of election committee, but he dared not act. He was invited by the Sixteen to Paris, and by the king forbidden entrance to the capital; he came, he was received with frantic applause, yet ventured in a hesitating mood into the king's presence, where the question of his assassination had been the last topic of discussion. In the king's presence, he saw that the whispered argument was whether he should be suffered to go out alive; but the king feared the people at the palace-gates. Guise hastily retiring, placed himself at the disposal of the Sixteen. The king sent troops into the town, the people threw up barricades. There was open insurrection. Guise had all qualities except the boldness needed for a perfect

act of usurpation. The revolt, therefore, was stilled for a time without producing revolution. The king's unpopularity among the extreme party of the orthodox which governed Paris was displayed in a way suited to the times. Superstition introduced into the temples something worse than money-changers. There was placed in one of the churches of Paris a waxen image of the king, executed in accordance with the rites of witchcraft, into which all good Christians were invited to stick pins.

For the death of unsentenced Reformers the Sixteen were clamorous ; one of them, Mathieu de Launay, who had at one time been a minister in the Reformed Church, solicited especially the public execution, already too long deferred, of the old potter. This happened in the year 1588, when Palissy was seventy-nine years old, and the age of King Henry III. was thirty-seven. The king, starched, frilled, and curled, according to his own fantastic custom, frequently visited the prisons, and felt interest in the old man, whom he regarded as an ancient servant of his mother. Finding that his age would not protect him from the stake, the king one day held with the potter this discourse, which has been preserved for us in a contemporary record :—

“My good man,” said the king, “you have been forty-five years in the service of the queen my mother, or in mine, and we have suffered you to live in your own religion, amidst all the executions and the massacres. Now, however, I am so pressed by the Guise party and my people, that I have been compelled in spite of myself to imprison these two poor women and you ; they are to be burnt to-morrow, and you also, if you will not be converted.”

“Sire,” answered the old man, “the Count de Maulevrier came yesterday, on your part, promising life to these two sisters, if they would each give you a night. They replied that they would now be martyrs for their own honour, as well as for the honour of God. You have said several times that you feel pity for me ; but it is I who pity you, who have said ‘I am compelled.’ That is not speaking like a king. These girls and I, who have part in the kingdom of heaven, we will teach you to talk royally. The Guisarts, all your people, and yourself, cannot compel a potter to bow down to images of clay.”

The girls were burnt a few months afterwards, in June, 1588. The news of their death reaching the Huguenot camp, Monsieur du Plessis said to the King of Navarre, shortly to be King Henry IV. of France : " Courage, sire, since even our girls can face death for the Gospel.

King Henry III., having relieved himself by assassination of the Duke of Guise and his brother, their surviving sister took secure revenge. Instructed by her, a monk named Clement, kneeling before the throne in supplicating attitude, stabbed the king in the belly. The monk was of course promptly slaughtered by the guards. The king was stabbed to death and perished thus in the year 1589.

The murder of the king was counted as a holy deed by the fierce Guisarts, who set up a statue of the murderer for public adoration, having this inscription on the pedestal : " St. Jacques Clement, pray for us sinners." In the same year Palissy the Potter died in the Bastille.

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1538. Settles at Saintes, and marries, 71; Saintes in his time, 72 his means of living, 75; is shown a foreign enamelled cup, 75, and conceives the design of discovering how to make others like it, 76; the art of pottery in his time, 77; struggles for the discovery of white enamel, 88; and attendant household cares, 87
1543. Appointed to survey the salt-marshes of Saintonge, 92, 97; meaning of the appointment, 92; begins to show what he has learnt from a close study of nature out of doors, 98; his account of the marshes, 100
1544. Resumes and continues the search for white enamel, 107; attendant household cares, 107
1546. While engaged in this struggle avows his heresy and assists in establishing a Reformed worship in Saintes, 118; his intense love of the woods and fields, 126; chafes at the ignorance of the farmers, 129; continues his struggle for the discovery of white enamel, 131
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1546. Takes an active part in the progress of the Reform movement in his town, 147, and
1557. appeals privately as an avowed heretic to the magistrates who condemn one of the preachers, 151. Publishes a book in or near this year, 176. Sees
1561. the Church of Saintes in full prosperity, 157, 158, and engages upon works at Ecouen for Montmorenci, and elsewhere for other patrons, 187, 200. The troubles of France (159, 191, 208) overwhelm the Reformers in Saintonge (216) and the plain-speaking (204) Palissy is arrested and sent for execution to Bordeaux, 219.
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1562. Relieved from prison at the intercession of noble employers, by being appointed potter to the Queen, and so removed, as a royal servant, from provincial jurisdiction, Palissy returns to Saintes, 227, and soon afterwards
1563. publishes a book (236) containing his opinions on agriculture, stones, springs, salts, 235, 236, an account of his delectable garden, 238, and his design for an impregnable fortress as city of refuge in those troublous times, 239. In the dedications to this book, 225, and in its

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1564. afterwards he removes from Saintes to Paris, and is employed by Catherine de Medicis in the works connected with the building of the Tuileries, 247
1565. Established in Paris, he throws open his natural history museum, and delivers in it discourses before the learned men of the capital (253) upon his researches into nature. Having continued to do this for several years, and finding his opinions uncontroverted, he publishes
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